

City and County of San Francisco
San Francisco Department of City Planning

Environmental Impact Report

580 California Street Office Building

FINAL
81.705E

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Public Comment Period: October 1, 1982 through
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- Changes from the text of the Draft EIR are indicated by solid dots at the beginning of each revised section, paragraph or table.

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580 California Street
office building :
1982.

580 California Street Office Building
Environmental Impact Report

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I. SUMMARY

A. PROJECT DESCRIPTION

Gerald D. Hines Interests proposes to construct a 23-story office building at 580 California St. The 16,000-sq.-ft. rectangular site is bordered on three sides by California, Kearny and Spring Sts. and is opposite the Bank of America Headquarters Building. The site is Lot 7 of Assessor's Block 240, located within the City's C-3-0 (Downtown Office) Planning Code Use District, and is surrounded primarily by high-rise and mid-rise buildings.

The proposed building would be 320 ft. tall and would provide about 340,000 gross sq. ft. of floor area, including about 329,500 gross sq. ft. of office space. The ground floor would contain about 10,500 gross sq. ft. of retail and lobby space. A mechanical penthouse would top the 23rd floor. The project would include one subsurface level containing mechanical equipment and accommodating about 35 passenger vehicles. The parking spaces would be reached by a ramp from Spring St. Three off-street loading spaces would be provided, at grade, from Spring St.

The building would be clad in granite and traditional in design, featuring a two-story pedestrian arcade at the base and large retail display windows along Kearny and California Sts. The top of the building would be shaped and detailed to provide visual interest and to contrast with the squared tops of surrounding buildings.

Construction would be expected to begin in early 1983 and to be completed within two years. Initial project occupancy would be scheduled for early 1985.

B. ENVIRONMENTAL SETTING

The site contains about 16,000 sq. ft. and is occupied by a four-story office building. The existing structure is built out to the property lines and contains about 70,000 gross sq. ft. of office space and one subsurface parking level. The existing building contains offices of the Fireman's Fund Insurance Company and has no ground-floor retail or banking uses.

C. ENVIRONMENTAL IMPACTS

In the Initial Study for the project (see Appendix A, p. 127) it was determined that the proposed building would have no significant effect in the following areas: land use compatibility, project visibility, operational noise, public services and utilities, biology, geology, hydrology, construction-related air quality, health hazards and cultural resources; these issues were focused out of the EIR and will require no further discussion. Not all issues covered in the EIR are physical environmental impacts as defined under the California Environmental Quality Act (CEQA).

Land Use and Zoning (see Section IV, p. 43). The project would be responsive to general objectives of the San Francisco Comprehensive Plan and policies stated for the C-3-0 (Downtown Office) District. The 320 ft. project tower would be the maximum height permitted in the 320-I Height and Bulk District. The building length would be about 124 ft., the length of the site; this is about 45 ft. less than the maximum permitted length of 170 ft. The diagonal dimension of about 175 ft. would be about 25 ft. less than the permitted maximum dimension of 200 ft. According to Section 124 of the City Planning Code, the basic permitted Floor Area Ratio (FAR) in the C-3-O District is 14:1, that is, a building may have a floor area up to 14 times the area of its site. This would permit development of about 224,000 gross sq. ft. on the project site. About 116,000 sq. ft. of basic permitted floor area would be transferred to the site from adjacent parcels under Section 127(a) of the Code (see Section IV.A, p. 43, for a detailed discussion of the transfer of development rights under the Planning code); the total project FAR would be about 21.3:1.

The proposed building foundation and subsurface parking level would extend beneath City sidewalks and would require a revocable encroachment permit from the Department of Public Works and a variance from Section 155(b) of the City Planning Code. Use of this area would not respond with the Transportation Element of the Comprehensive Plan. The number of off-street loading spaces would conform to City Planning Commission Resolution No. 9286 and would exceed the minimum requirements set forth in Section 154 of the City Planning Code. Provision of parking would not respond with a policy of the Downtown Parking Plan of the Transportation Element of the Comprehensive Plan.

The Department of City Planning (DCP) has prepared a document, Guiding Downtown Development (GDD), July 1982, which contains a series of proposed land use controls for the downtown. (See Table 2, p.46, and Section VII, Alternatives Two and Three, pp. 108-116 for a discussion of GDD.) The project would exceed the base 12:1 FAR for office space as discussed in GDD by about 2:1 and would contain an additional 7:1 FAR through the transfer of development rights under Section 127(a). This procedure would not be affected by GDD. The project would be 30 ft. shorter than the GDD recommended height limit of 350 ft. The project would include ground-floor retail space, encouraged by GDD. With the exception of the pedestrian arcade along California St., no public open space would be provided by the project. The provision of parking would not be consistent with GDD policy.

Urban Design (see Section IV, p. 47). The project would require the demolition of the existing four-story structure on the site. The proposed building would be similar in scale to existing high-rise development in the vicinity. The defined two-story base and large retail windows would provide a pedestrian scale and visual interest at the street level. Upper story windows would be a combination of set in and bay windows. Facade detailing would reduce the appearance of bulk and the top of the building would be sculptured. Much of the project shadow pattern would coincide with shadows cast by existing nearby structures. The project would not shade any public parks or plazas. The project would modify the wind environment of the site vicinity, but street level wind speeds would generally remain similar to existing conditions.

Employment, Housing and Fiscal Factors (see Section IV, p. 59). The project would provide about 1,345 permanent, full-time jobs, resulting in an increase in on-site employment of about 1,120 jobs. Assuming project tenants would be primarily in finance, insurance and real estate, the employment multiplier effect would result in about 1,590 additional jobs in other sectors of the Bay Area economy. The project would also provide about 795 person-years of construction labor during the two-year construction period. Through the multiplier effect, construction would result in about 1,230 additional person-years of employment in the Bay Area.

- The project would contribute to the total amount of new office space available in the downtown area and to the demand for housing in San Francisco. Based on the Department of City Planning's housing formula for housing requirements for office development, the

project employees would generate a net demand for about 230 new housing units. Additional demand for City services generated by the project would result in costs to the City. Generally, the overall costs per unit of services provided (per sq. ft. or per employee) to the new building would be lower than for the existing building.

Transportation (see Section IV, p.72). Construction would require the use of the curb lanes on Kearny and California Sts., and would temporarily affect existing traffic conditions. Sidewalks on California, Kearny and Spring Sts. would be closed for 14 to 18 months; covered walkways would be provided for pedestrians.

The proposed project would generate approximately 760 new peak-hour trips to and from the project site. Of these, an estimated 240 trips would be made by auto, 190 would be on Muni, 130 on BART, and the remaining 200 on other public transit (SamTrans, Southern Pacific, AC Transit) and other modes (walking, taxis, etc.). The project would result in an increase of less than 10% in the estimated ratio of traffic volumes to capacity of surrounding intersections. Space for valet parking of about 35 automobiles would be provided in a basement level reached by a one-way ramp from Spring St. Most of the project demand for parking would have to be accommodated by off-site parking. Pedestrian traffic on California St. would increase 1982 sidewalk traffic from five to ten percent of capacity to as much as 15% of capacity during noon and p.m. peak hours.

Other Impacts. Because of the increase in building size, energy use on the project site would increase; however, the proposed building would be more energy efficient than the existing structure on the site. Project energy consumption would meet or exceed Title 24 standards. Pile driving would not be required for the project. Construction activities, particularly excavation and exterior finishing, could raise interior noise levels in offices nearest the site to as high as 78 dBA at 550 Kearny St. and 75 dBA at 550 California St., assuming closed windows. Noise levels above 75 dBA would interfere with normal speech and could be distracting to employees in these buildings.

D. MITIGATION MEASURES

Various measures have been identified that would reduce or eliminate potential environmental impacts resulting from the proposed project (see Section V, p.97). The City Planning Commission could include some or all of these measures as conditions of

I. Summary

project approval. Mitigation measures which are specific to the project and not required by statutes or laws include: coordinating construction activities; providing long-term parking for about 35 vehicles to partially alleviate the parking demand generated by the project; encouraging a "flex-time" system for project employees; providing a transportation broker to encourage the use of transit systems and ridesharing; and installing a dual-pane tinted window system and other energy-saving devices to reduce project energy consumption.

E. ALTERNATIVES TO THE PROPOSED PROJECT (see Section VII, p. 105).

Alternative One would not use the transfer of permitted basic gross floor area from adjacent parcels to increase the amount of office space. This alternative would consist of a 15-story (200 ft.) office building containing approximately 224,000 gross sq. ft. of commercial space (FAR of 14:1). There would be one retail/banking level (containing about 10,500 sq. ft.) and 14 floors of office space (containing about 213,500 sq. ft.). There would be two levels of subsurface parking which would not extend beneath any City sidewalks. This alternative would be similar to the project in design and form, but would be about 120 ft. shorter. Compared to the proposed project, the amount of office space would be reduced by about 35% under Alternative One and site-related travel would be about 40% less. This alternative is unacceptable to the project sponsor because in the sponsor's opinion, it would be an economic underuse of the site.

Alternative Two would be a 17-story office building (about 240 ft. tall) designed to comply with the recommended guidelines contained in Guiding Downtown Development (GDD). This alternative would contain about 233,000 gross sq. ft. of office and retail space. This represents the GDD base commercial space for the site (about 192,000 gross sq. ft.) plus about 31,000 sq. ft. of basic permitted floor area transferred from an adjacent parcel under Section 127(a) of the City Planning Code. This transfer would result in a total FAR of about 14:1. The ground floor would contain about 10,000 gross sq. ft. of retail space in five establishments, open space uses of about 9,300 sq. ft., and 16 floors of office space. This alternative would not provide off-street parking for passenger vehicles. The amount of office space would be reduced about 30%; the building tower would be about 80 ft. shorter in height than the project. Under this alternative, operational traffic impacts would be similar to the project although the number of peak-hour trips would be reduced about 40%. In the opinion of the project sponsor this alternative is unacceptable because

it would not maximize the allowable developable area and would thus be an economic underuse of the site. The sponsor also rejects this alternative because the project design is, in the sponsor's opinion, already attractive and of high quality.

Alternative Three would be a 24-story combined office and residential building, approximately 330 ft. tall. This alternative would provide the base amount of commercial space permitted in GDD and a transfer of about 25,000 sq. ft. of basic permitted gross floor area to the site from an adjacent parcel. Alternative Three would contain about 217,000 gross sq. ft. of office, 10,000 sq. ft. of retail space, 12,100 sq. ft. of open/recreational space and about 80,000 gross sq. ft. of residential space (73 condominiums). The overall FAR for this alternative would be about 19:1, which includes 5:1 additional FAR for housing (over the recommended base office FAR of 12:1 and about 2:1 FAR from the transfer of floor area under Section 127 of the Planning Code). There would be two levels of subsurface parking; all parking would be allocated for the residential units. The parking levels would not extend beneath City sidewalks. Separate lobby and elevator accesses would be provided for the residential and office portions of the building. Open space for building residents would be provided by private balconies for individual condominiums; under GDD, this space would partially satisfy the recommended GDD requirement to provide recreation and open space for the commercial portion of the building. Other open space uses would include the ground-floor pedestrian arcade and a cultural facility on the second floor. Under Alternative Three the amount of office space would be reduced about 35%; the building tower would be about 10 ft. taller than the proposed project. This alternative would satisfy on-site a portion of the housing demand generated by the office space. Operational traffic impacts would be about half those of the proposed project. In the opinion of the project sponsor this alternative is unacceptable because it would be an economic underuse of the site and the site is not a suitable location for residential use.

Alternative Four is the No Project alternative. Should this alternative be implemented, the site conditions and uses would remain the same as at present. This alternative would preserve future options for development of the site. This alternative could result in the development of office space comparable to the project at another location. Alternative Four has been rejected by the project sponsor because of existing interests in the site and the sponsor's conviction that the project site is a prime location for office development in the City.

II. PROJECT DESCRIPTION

A. PROJECT SPONSOR'S OBJECTIVES

The project sponsor, Gerald D. Hines Interests, proposes to construct a 23-story office building at the northeast corner of California and Kearny Sts. (see Figure 1, p. 8). The sponsor's objectives are to construct a high-quality, locally compatible commercial office building, increase the amount of office space available in the downtown area, and realize a reasonable return on investment. The project sponsor intends to develop an energy-efficient building that would architecturally complement adjacent high-rise structures. The project architect is Johnson/Burgee of New York.

B. PROJECT LOCATION

The project site is Lot 7 in Assessor's Block 240, located within the City's C-3-0 (Downtown Office) Planning Code Use district. The 16,000-sq.-ft. rectangular site, which has frontages of 124 ft. on California St. and 128 ft. on Kearny and Spring Sts., is opposite the Bank of America Headquarters Building (see Figure 2, p. 9). The proposed project would replace the four-story Fireman's Fund Insurance Building.

C. PROJECT DESCRIPTION

The project would be a 320-ft.-tall, 23-story building, containing a total of about 340,000 gross sq. ft. of floor area, excluding foundation, mechanical and parking space (see Figure 3, p. 10). There would be one subsurface level containing mechanical equipment and accommodating about 35 passenger vehicles (see Figure 4, p. 11). The parking facility would be reached by a ramp at the northeast corner of the site via Spring St. Three off-street loading spaces would be accessible at grade from Spring St.

The main building entrance on California St. would provide access to the office lobby and elevator banks. Separate entrances to ground-floor retail space would be located on California and Kearny Sts. (see Figure 5, p. 12). Total lobby, elevator and retail area on the first floor would be about 10,500 gross sq. ft. The upper floors would contain offices



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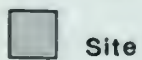


FIGURE 1: Project Location

SOURCE: Environmental Science Associates, Inc.

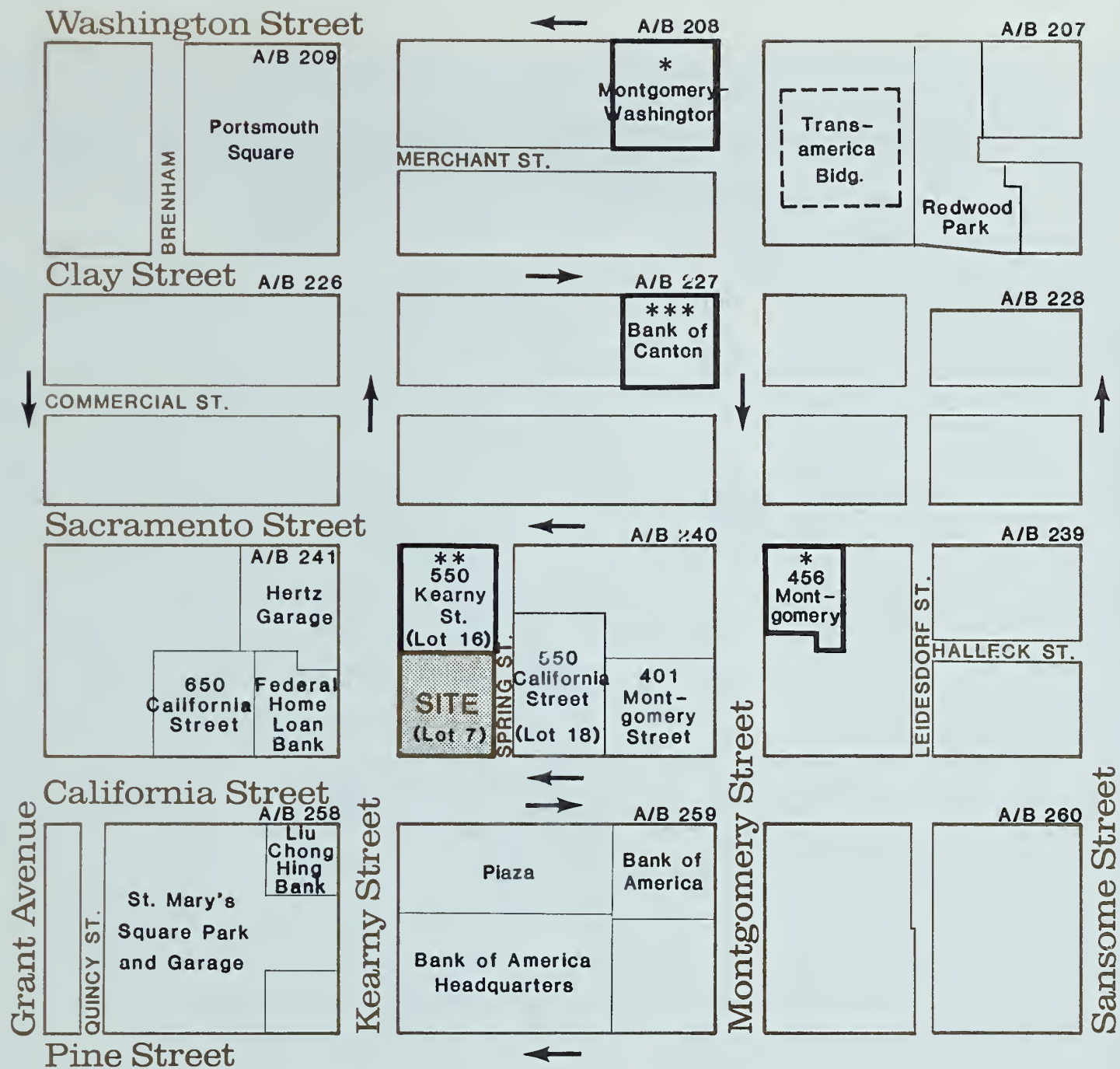


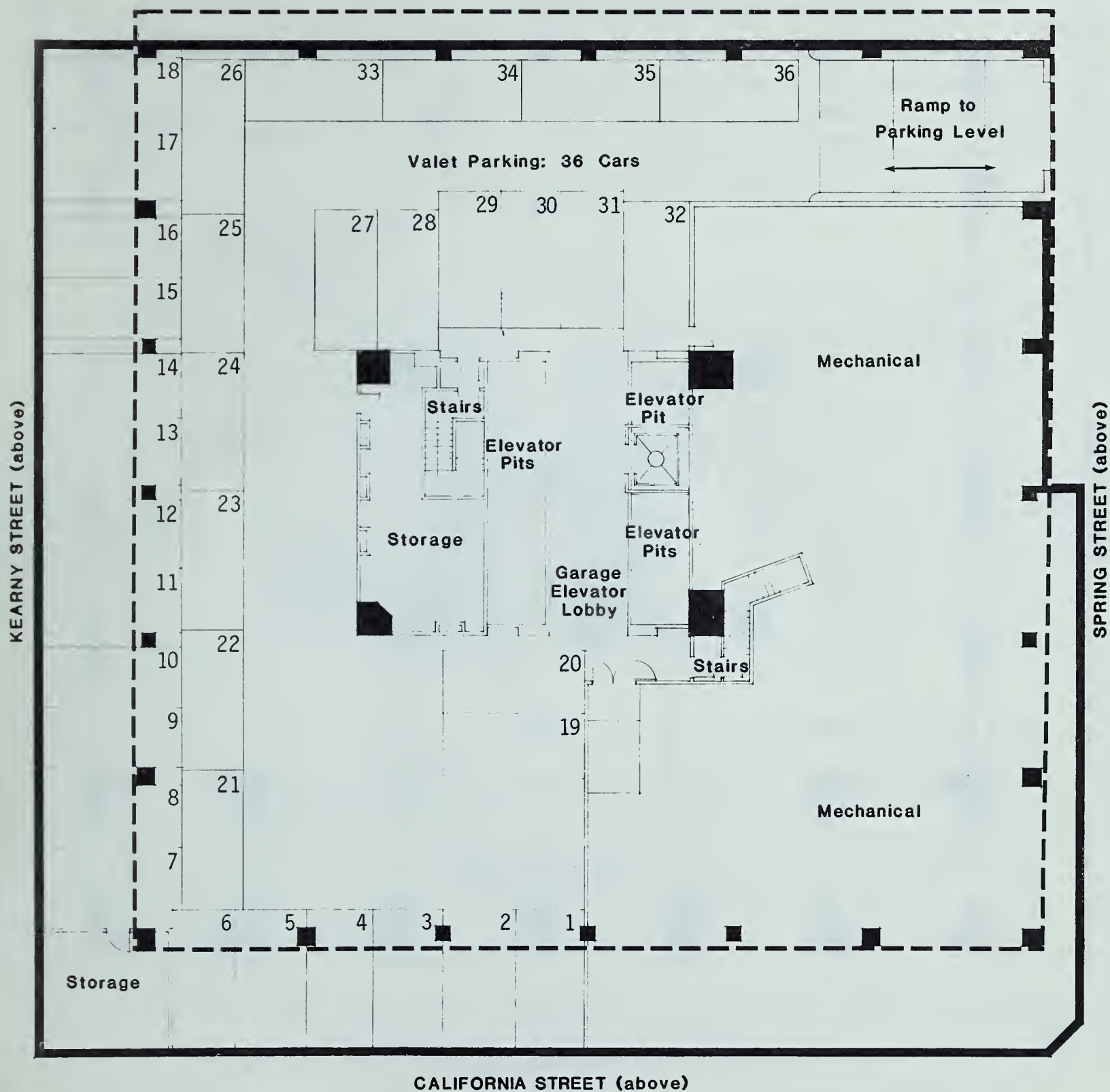
FIGURE 2: Site and Vicinity

SOURCE: Environmental Science Associates, Inc.



SOURCE: Johnson Burgee Architects;
Square One Film and Video

FIGURE 3: California St. Elevation
(Photo of Model)



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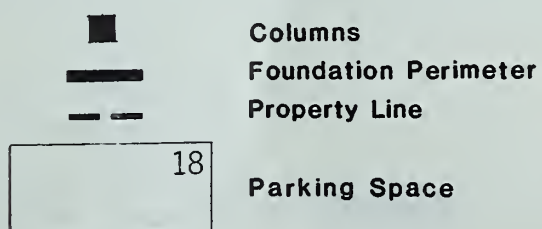
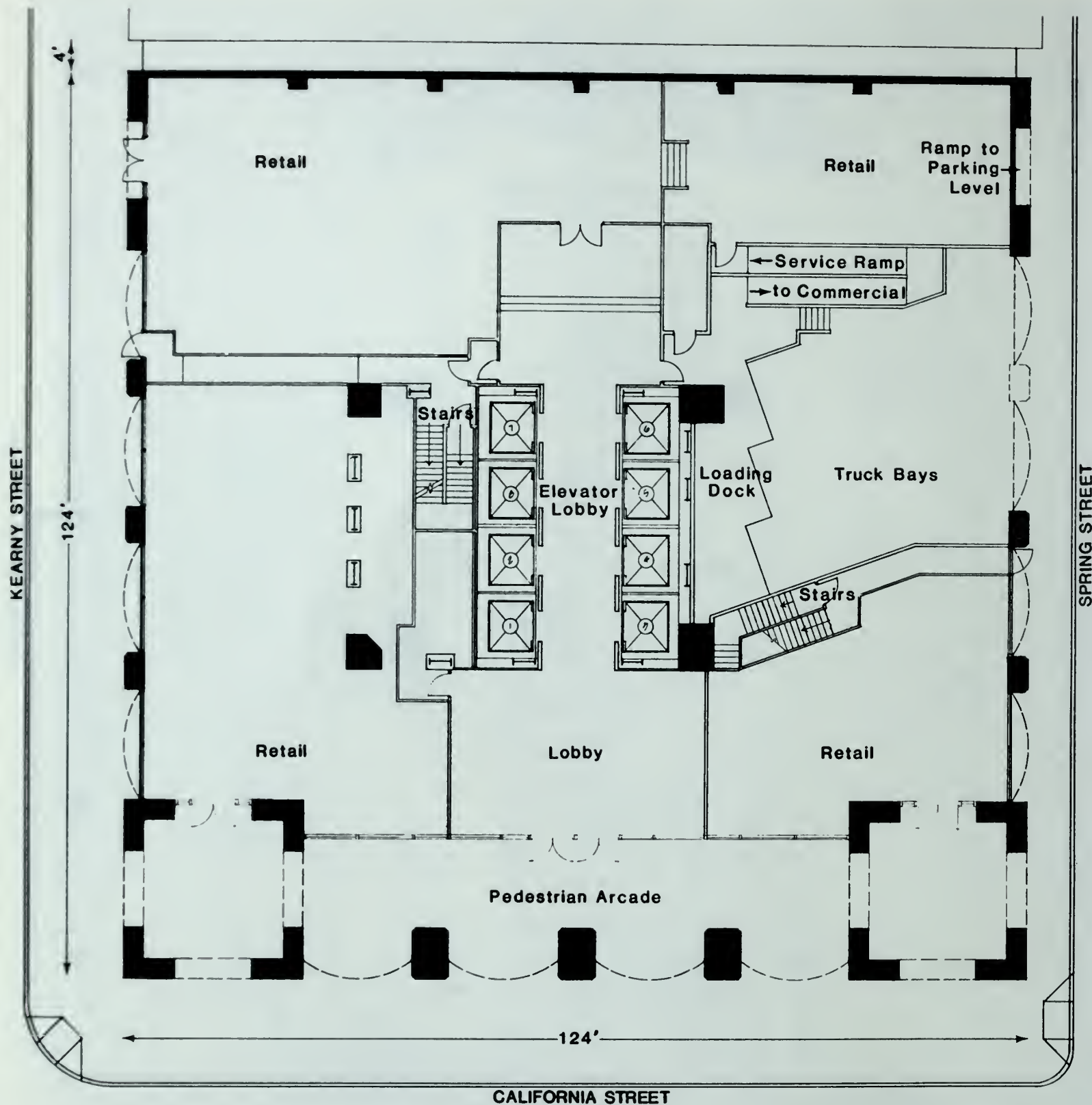


FIGURE 4: Parking Level Floor Plan

SOURCE: Kendall/Heaton/Associates, Inc.



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

-  Columns
-  Windows (above)



FIGURE 5: Ground-Floor Plan

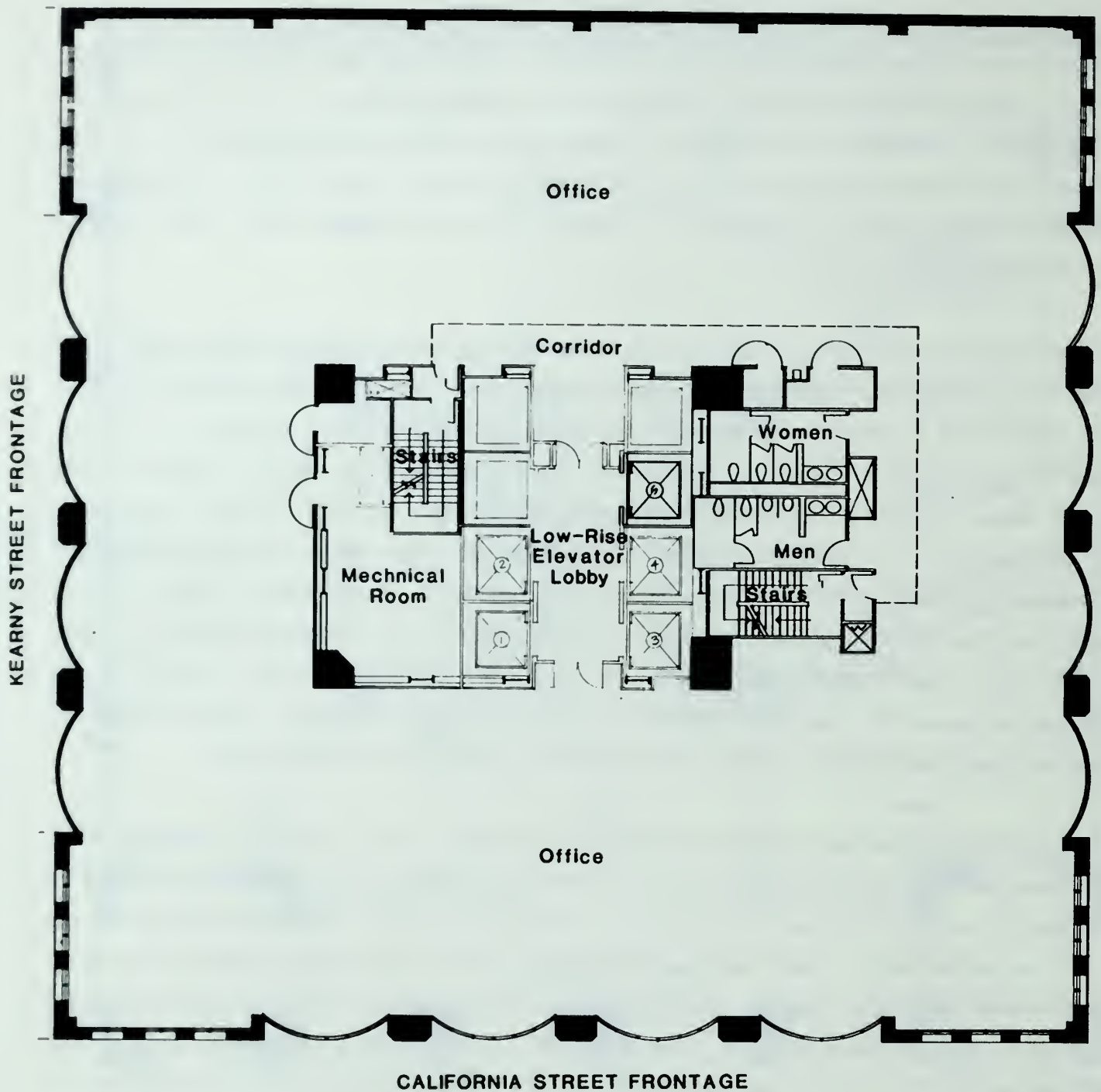
SOURCE: Kendall/Heaton/Associates, Inc.

II. Project Description

(see Figure 6, p. 14); there would be a total of about 329,500 gross sq. ft. of office space on the second through 23rd floors. The second floor would offer about 12,500 gross sq. ft., the third through 23rd floors would average about 15,000 gross sq. ft. The office portion of the building would rise to a height of approximately 320 ft.; there would be a rooftop mechanical penthouse (see Figure 7, p. 15), about 12 ft. tall. (Up to 16 ft. of height for mechanical penthouses and equipment is exempt from the height limit under Planning Code Section 260(b).)

The exterior of the building would be granite and light in color, and the facade treatment would be a three-part composition (having a distinct base, central section, and top). The base would have a two-story pedestrian arcade along California St. intended to provide pedestrian scale (see Figure 7, p. 15). At the ground level, large display windows would provide visual interest to pedestrians on Kearny and California Sts. The four corners of the building would be anchored by distinct vertical elements rising to the roofline and containing "punched" windows set in the granite exterior. Three five-ft.-wide columns would rise from the street to the top of the 21st story in the central section of each facade; each column would be topped with a statue (see Figures 7 and 8, pp. 15-16). Recessed between the columns would be curved, bay-style windows. The building top would be sloped and consist of tinted glass with wrought iron embellishments.

The basic Floor Area Ratio (FAR) allowed under Section 124 of the City Planning Code for a structure in the C-3-O District is 14:1; that is, a building may have a floor area up to 14 times the area of its site. This would permit development of about 224,000 gross sq. ft. on the project site. Under Section 127(a) of the Code, the project sponsor intends to purchase and transfer to the site a total of about 116,000 gross sq. ft. of basic permitted floor area from adjacent parcels. About 69,000 sq. ft. would be transferred from the Cahill property on Lot 16 of Assessor's Block 240 (550 Kearny St.), and about 47,000 sq. ft. would be transferred from the Utah International Property on Lot 18 of Assessor's Block 240 (550 California St.) (see Figure 2, p. 9). The total gross floor area of the building would be approximately 340,000 sq. ft., representing a total project FAR of about 21.3:1 (see Table 1, p. 17). (See Section IV.A, p. 43, for a detailed discussion of the base FAR and the transfer of development rights under the Planning Code.) This would exceed the allowable basic FAR of 14:1 by about 7.3:1.



LEGEND



FIGURE 6: Typical Low-Rise Office Floor Plan

SOURCE: Kendall/Heaton/Associates, Inc.

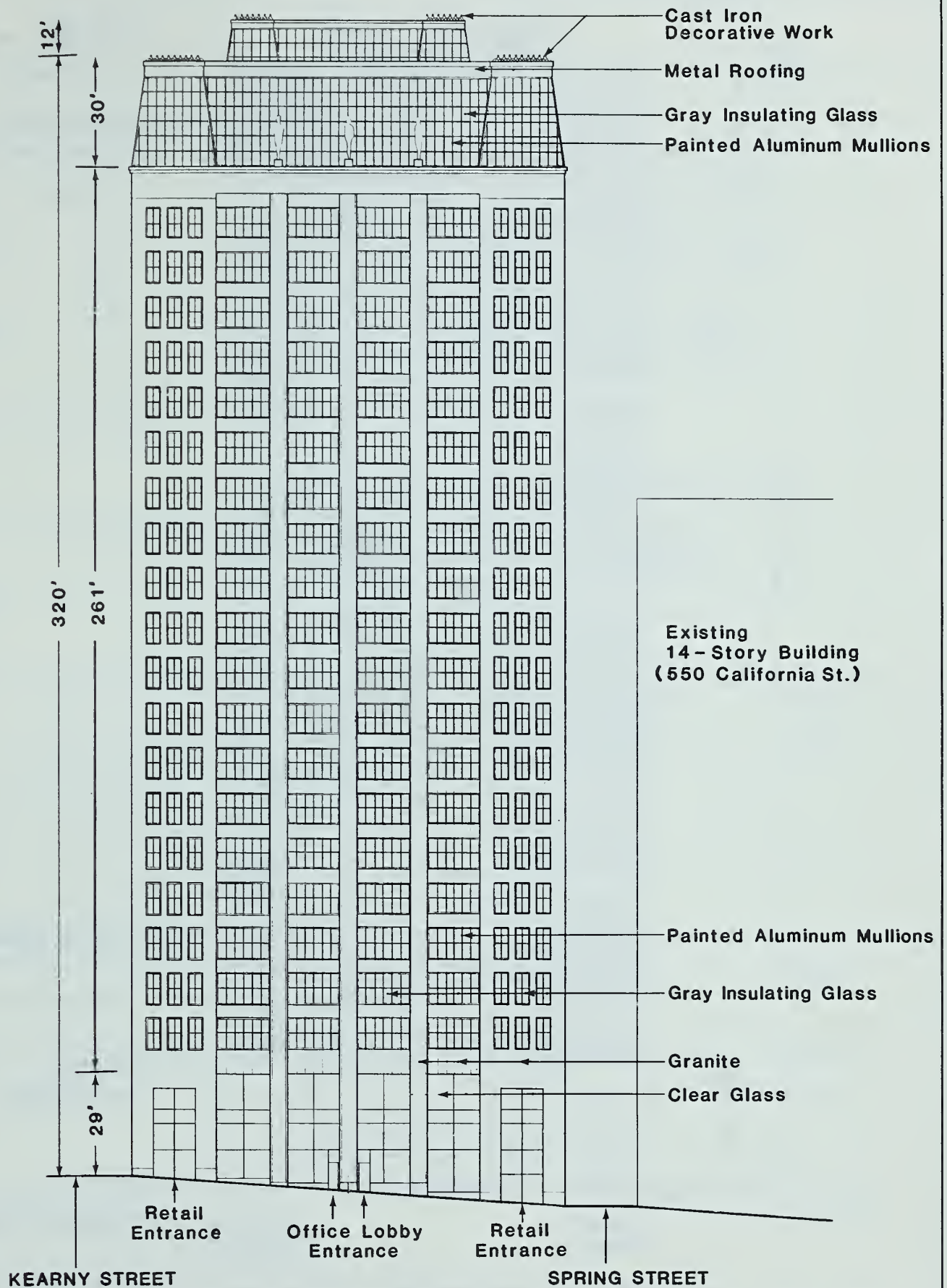
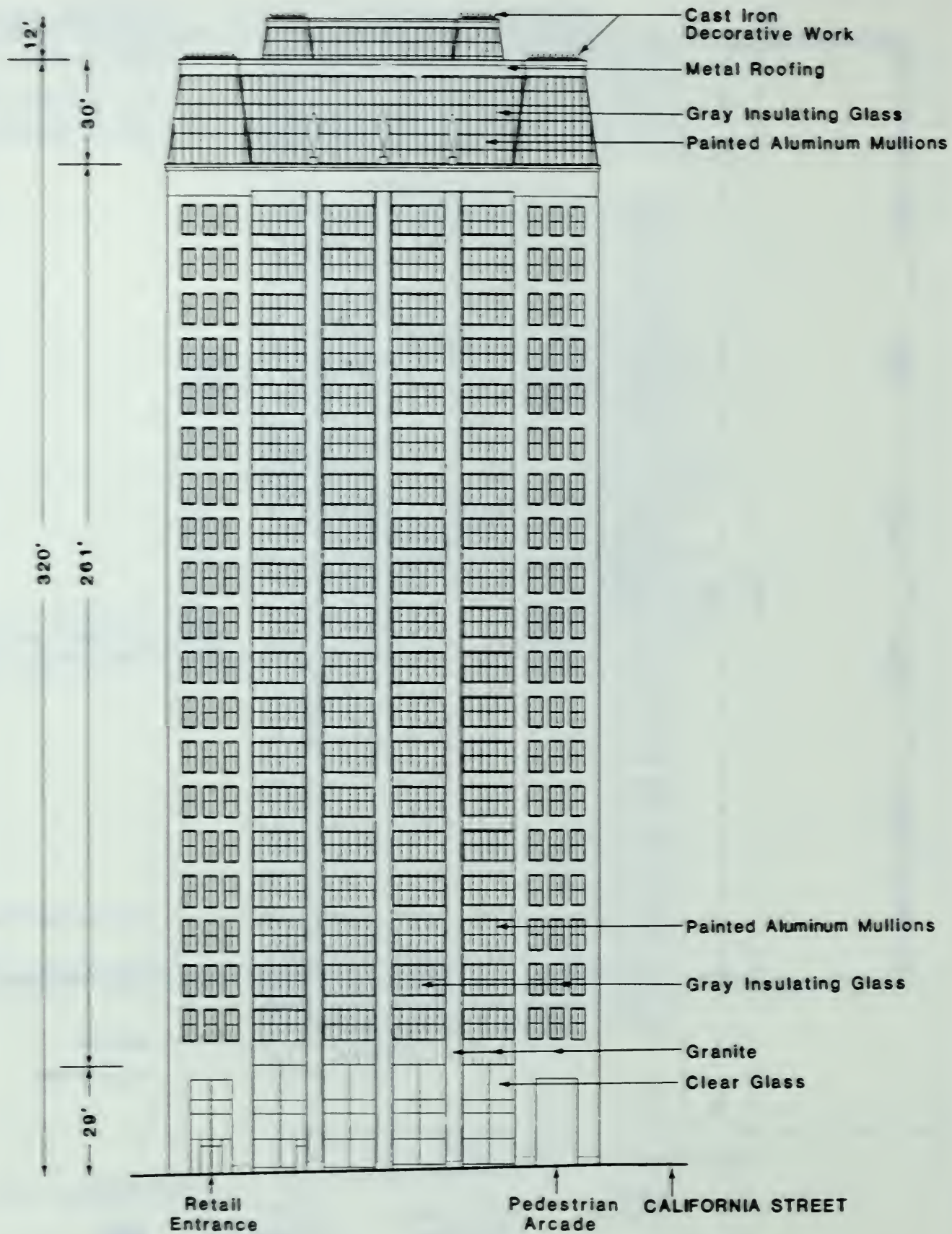


FIGURE 7: California Street Elevation

SOURCE: Kendall/Heaton/Associates, Inc.



0 40
FEET

FIGURE 8: Kearny Street Elevation

SOURCE: Kendall/Heaton/Associates, Inc.

II. Project Description

TABLE 1: PROJECT CHARACTERISTICS

NUMBER OF STORIES*		HEIGHT AND BULK MEASUREMENTS	
Retail/Lobby	1	<u>Proposed</u>	<u>Permitted**</u>
Office	<u>22</u>		
<u>Total Stories</u>	23	Height: 320 ft.	320 ft.
		Length: 124 ft.	170 ft.
		Diagonal: 175 ft.	200 ft.

PROPOSED FLOOR AREA

<u>Use</u>	<u>Gross Sq. Ft.</u>	<u>Net Leasable Sq. Ft.</u>
Retail (6,500 sq. ft.) and Lobby	10,500	6,500
Office	<u>329,500</u>	<u>301,900</u>
<u>Total Project</u>	340,000	308,400

FLOOR AREA CALCULATIONS

	<u>Floor Area (gross)</u>	<u>FAR</u>
Basic Permitted Floor Area***	224,000 sq. ft.	14.0:1
Transfer Basic Permitted Floor Area****		
-Lot 16 of Assessor's Block 240 (550 Kearny St.-Cahill Property)	69,000 sq. ft.	--
-Lot 18 of Assessor's Block 240 (550 California St.-Utah International)	<u>47,000 sq. ft.</u>	--
Total Transfer of Basic Permitted Floor Area	116,000 sq. ft.	7.3:1
Total Floor Area Permitted by Code	340,000 sq. ft.	21.3:1
Proposed Project	340,000 sq. ft.	21.3:1

* Excluding one subsurface level, containing mechanical equipment and accommodating about 35 passenger vehicles

** Section 270 of the City Planning Code

*** Section 124 of the City Planning Code

**** Section 127(a) of the City Planning Code (See Section IV.A, p. 44 of the EIR of a discussion of the transfer of development rights.)

SOURCE: Environmental Science Associates, Inc.

PROJECT OCCUPANCY

The project sponsor proposes to lease approximately 6,500 net sq. ft. of ground-floor retail space, which is expected to accommodate about three tenants. Commercial retail activities could include a variety of uses, such as a branch bank, a small apparel store or office equipment store. Approximately 301,900 net sq. ft. of office space is expected to be leased on the upper floors. Tenants are expected to be primarily professional service firms and executive departments of financial institutions and other businesses. The sponsor estimates the number of tenant firms to be about 15 and anticipates that most would have a larger proportion of management, professional and technical staff than clerical staff./1/

PROJECT SCHEDULE, COST AND APPROVAL REQUIREMENTS

SCHEDULE

Detailed project design is scheduled by the sponsor for completion in late 1982. Demolition and site clearance are anticipated to require about two months; excavation, one month; foundation preparation, two months; steel erection, six months; exterior finishing, six months; and interior finishing, six months. Some of these time durations would overlap. Project occupancy is expected begin in early 1985 based on a full construction period of about two years./1/

COST

Project development costs would be about \$50 million in 1982 dollars, including approximately \$24 million for basic construction. Retail space on the ground floor is expected to rent for approximately \$20 per sq. ft. per year. Office space is expected to rent for an average of about \$30 per square ft. per year./2/

APPROVAL REQUIREMENTS

Following a public hearing before the City Planning Commission, responses to all written and oral comments will be prepared; this EIR will be revised accordingly and presented to the City Planning Commission for certification as to accuracy and completeness.

II. Project Description

Under its policy of Discretionary Review of all downtown high-rise buildings during the period of Interim Controls, the City Planning Commission would review, per its Resolution No. 8474, adopted January 17, 1980, the building design and its environmental context in detail./3/ Under Section 127(a) of the City Planning Code, the proposed project would transfer to the site a total of about 116,000 gross sq. ft. of basic permitted floor area from two adjacent lots on Assessor's Block 240. This would allow the proposed building to have an FAR of 21.3:1; no special action would be required of the City Planning Commission to permit the floor area transfer. (See Section IV.A, p. 44, for a detailed discussion of the transfer of development rights under the Planning Code.) Upon purchase of the permitted gross floor area, notice of the transfer would be recorded with the deeds of all the properties affected. After a public hearing the Planning Commission would adopt a resolution approving, approving with conditions, or disapproving the project. If the project were approved by the City Planning Commission, the project sponsor would then obtain demolition, building and related permits from the Central Permit Bureau of the Department of Public Works.

- The subsurface level proposed for the project would extend beneath the California St. and Kearny St. sidewalks. A revocable encroachment permit, to allow the use of subsurface space beneath public sidewalks, would be applied for with the building permit. According to Section 310.1 of the San Francisco Building Code, the encroachment permit application would require approval from the Superintendent of Building Inspection and City Engineer.

NOTES - Project Description

/1/ James C. Buie, Jr., Project Manager, Gerald D. Hines Interests, telephone communication, March, 24, 1982.

/2/ James C. Buie, Jr., Project Manager, Gerald D. Hines Interests, written communication, April 5, 1982.

/3/ City Planning Commission Resolution No. 8474, January 17, 1980. Board of Supervisors Ordinance 240-80, June 1, 1980, established interim limitations in effect until July 1, 1981 on the use of bonuses. The limitations were extended (in June 1981) until September 1, 1981 and, subsequently, by Ordinance 34-82, until March 1, 1983.

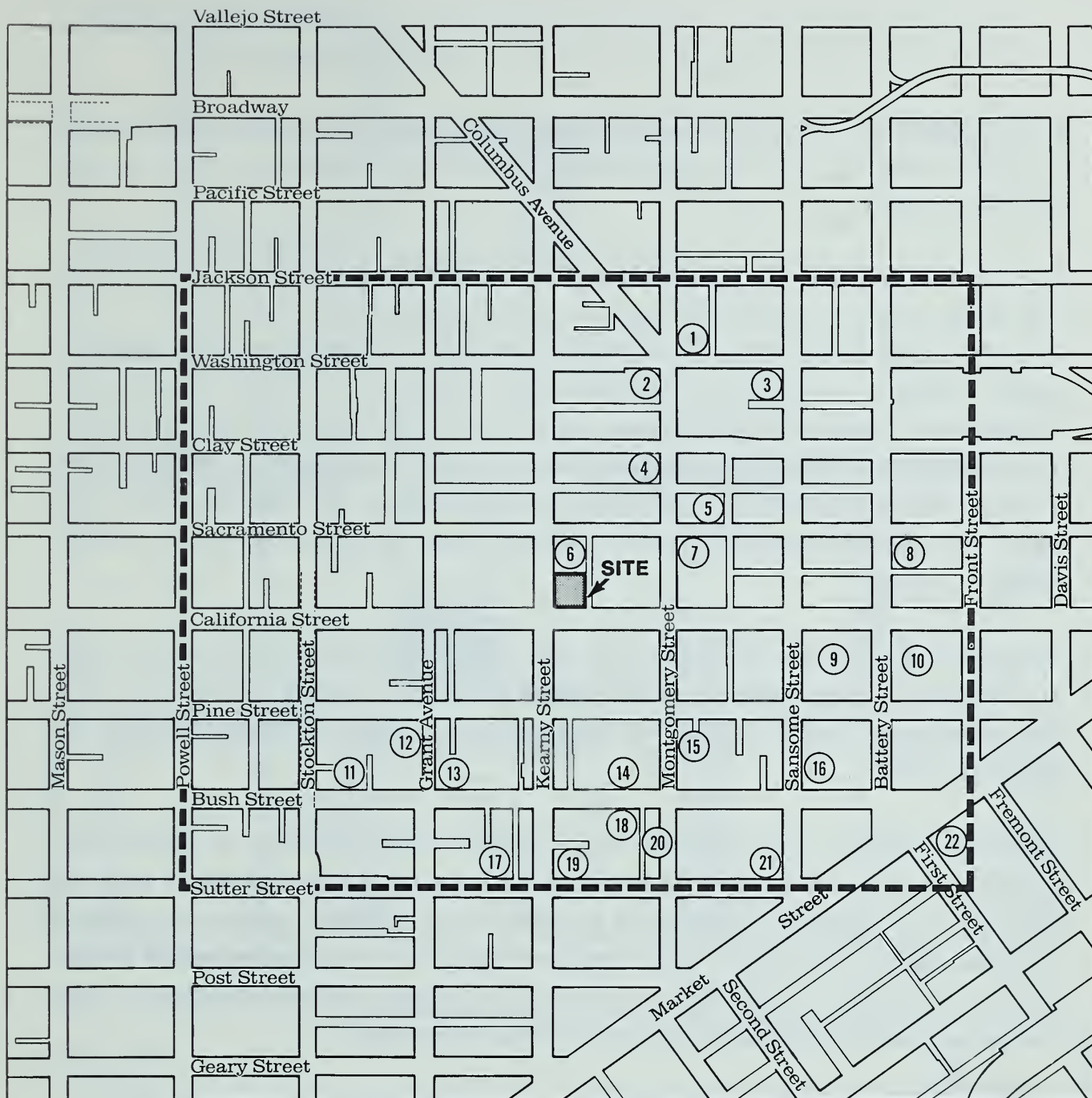
III. ENVIRONMENTAL SETTING

A. LAND USE AND ZONING

- The project site is Lot 7 of Assessor's Block 240 and is bounded by California, Kearny and Spring Sts. (see Figure 9, p. 21). The site is presently occupied by a four-story office building. The existing structure is built out to the property lines and contains approximately 70,000 gross sq. ft. of office space and a subsurface parking level, with 24 spaces. The building, which has no ground floor retail or banking space, is currently occupied by the Fireman's Fund Insurance Company; the firm is scheduled to vacate the structure by the fourth quarter of 1982 and will relocate most of its offices to Novato. This relocation is not a result of the proposed project.

Predominant land uses in the vicinity consist of high-rise and mid-rise office buildings with branch banks, retail stores and eating and drinking establishments on the ground floors. Adjacent to the site on the north is the six-story 550 Kearny St. office building; a five-story (71,400 gross sq. ft.) addition to this building is currently under construction. East of the site, across Spring St., is the 13-story 550 California St. building, and to the northeast is the six-story 635 Sacramento St. garage and office building. The 52-story Bank of America Headquarters Building is located south of the site, at 555 California St. Other buildings on blocks surrounding the site primarily contain office space with some ground-floor retail uses. St Mary's Square (a public park and parking garage) is located one block southwest of the project site, Portsmouth Square (a public park) is located two blocks to the north, Transamerica Redwood Park is located three blocks to the northeast, and there is a plaza on the north side of the Bank of America Building, directly across California St.

- There are 18 office buildings, including conversions, under construction or approved within three blocks of the project site (see Figure 9). These developments, upon full buildout, will provide about 2.8 million gross sq. ft. of net new office space and 94,250 gross sq. ft. of net new retail floor area ("net new" refers to the increase in office and retail floor area after office and retail space demolished to clear sites for the new buildings has been subtracted). In addition, four office developments are proposed within three blocks of the site and are under formal environmental review by the Department of City Planning (see Figure 9): 569 Sacramento St.; the Russ Tower addition at 350 Bush St.; 333 Bush St.;



LEGEND

--- 3-Block Radius Boundary

- | | |
|---|--|
| 1. 736 Montgomery (under construction) | 16. 160 Sansome (approved) |
| 2. Montgomery/Washington (under construction) | 17. Sloane (under construction-conversion) |
| 3. 401 Washington (approved) | 18. 333 Bush (under review) |
| 4. Bank of Canton (approved) | 19. 222 Kearny (under review) |
| 5. 569 Sacramento (under review-conversion) | 20. 101 Montgomery (under construction) |
| 6. 550 Kearny Addition (under construction) | 21. One Sansome (under construction) |
| 7. 456 Montgomery (under construction) | 22. Central Plaza (approved) |
| 8. 353 Sacramento (under construction) | |
| 9. 333 California (approved) | |
| 10. 122-130 Battery (approved) | |
| 11. 582 Bush (approved) | |
| 12. 453 Grant (approved) | |
| 13. 466 Bush (approved) | |
| 14. 350 Bush-Russ Tower (under review) | |
| 15. 250 Montgomery at Pine (approved) | |



● **FIGURE 9: Office Projects Under Construction, Approved and Under Review Three Blocks of Project Site (as of October 1982)**

SOURCE: Department of City Planning and Environmental Science Associates, Inc.

III. Environmental Setting

and 222 Kearny St. If approved and constructed, these developments would provide about 1.1 million gross sq. ft. of net new office floor area and 12,500 gross sq. ft. of net new retail floor area.

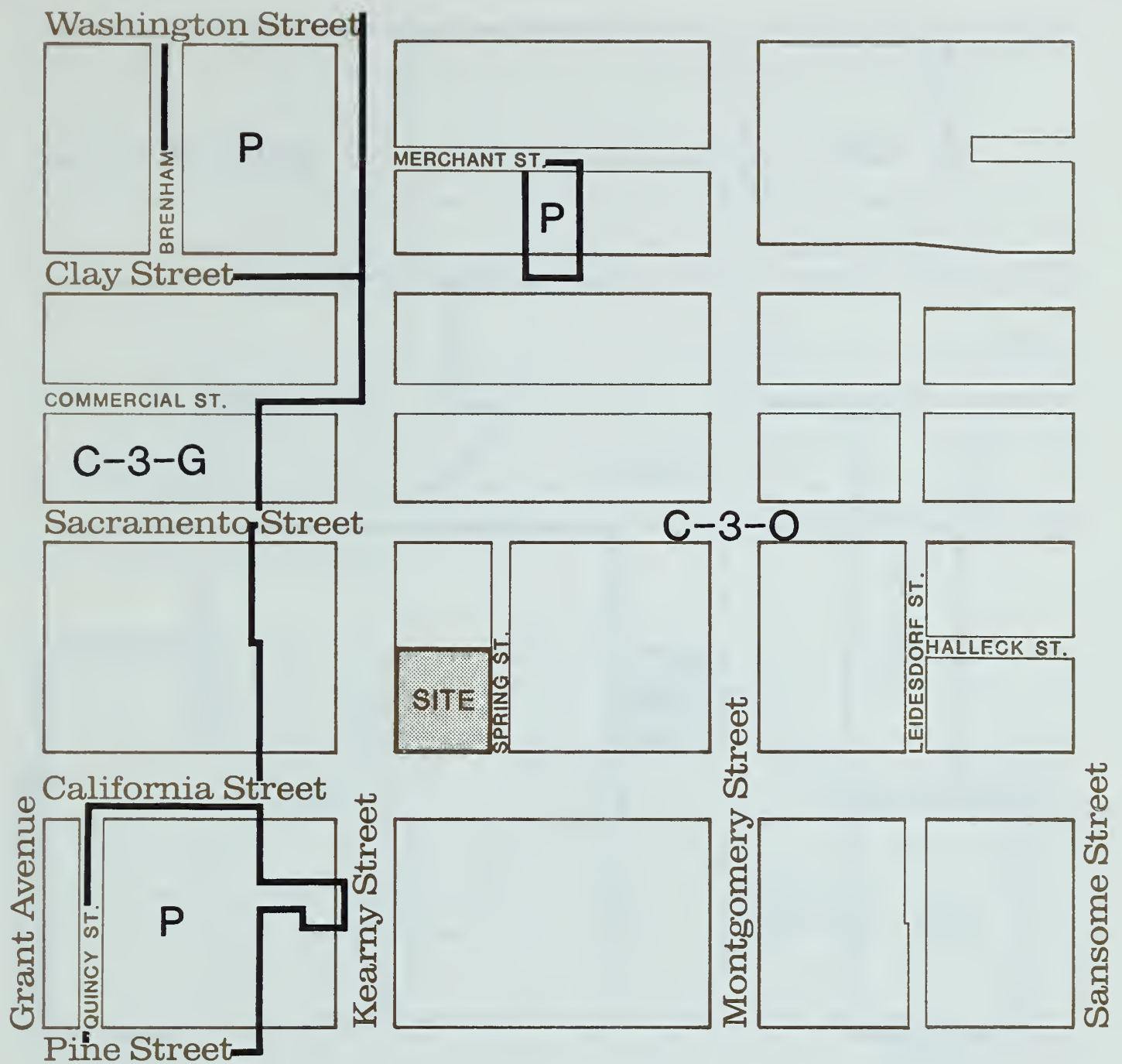
The City Planning Code Use Classification for the site is C-3-0, Downtown Office District (see Figure 10, p. 23). Office and retail uses are permitted in this zoning district with a basic Floor Area Ratio (FAR) of 14:1 (Section 124 of the City Planning Code). Under the Interim Controls on downtown high-rise office development imposed by Municipal Ordinance No. 240-80 (amending Section 126 of the City Planning Code), effective July 1, 1980, development bonuses are not permitted for office use; bonuses for residential and hotel use may be permitted by Conditional Use authorization. The transfer of permitted basic floor area from contiguous lots is permitted under Section 127(a) of the Planning Code.

The project site is in the 320-I Height and Bulk District, in which the maximum permitted height is 320 ft., the maximum permitted facade width above a height of 150 ft. is 170 ft. and the maximum horizontal diagonal dimension above a height of 150 ft. is 200 ft. (see Figure 11, p. 24).

Off-street parking is not required for commercial uses in the C-3-0 District but, according to Section 204.5(c) of the City Planning Code, up to seven percent of the gross floor area of a building may be devoted to parking as an accessory use when no parking is required. Section 152 of the Code provides a schedule of required off-street loading spaces. On January 21, 1982, the City Planning Commission adopted Resolution No. 9286 containing revised guidelines for off-street loading requirements.

Cumulative Office Development Downtown

Existing office space in San Francisco totals about 57.2 million gross sq. ft. (see Table B-1, Appendix B, p. 245). About 7.8 million gross sq. ft. of office space is currently under construction. About 5.4 million gross sq. ft. has been formally approved but is not yet under construction, and an additional 4.2 million gross sq. ft. of office space is under formal review. Together these total 17.4 million gross sq. ft. of new office space. About 1.3 million gross sq. ft. of existing office space has been or is proposed to be demolished to clear the sites for these office developments. This results in a net addition of 16.1 million gross sq. ft. of new office space in Downtown San Francisco. For analysis



LEGEND


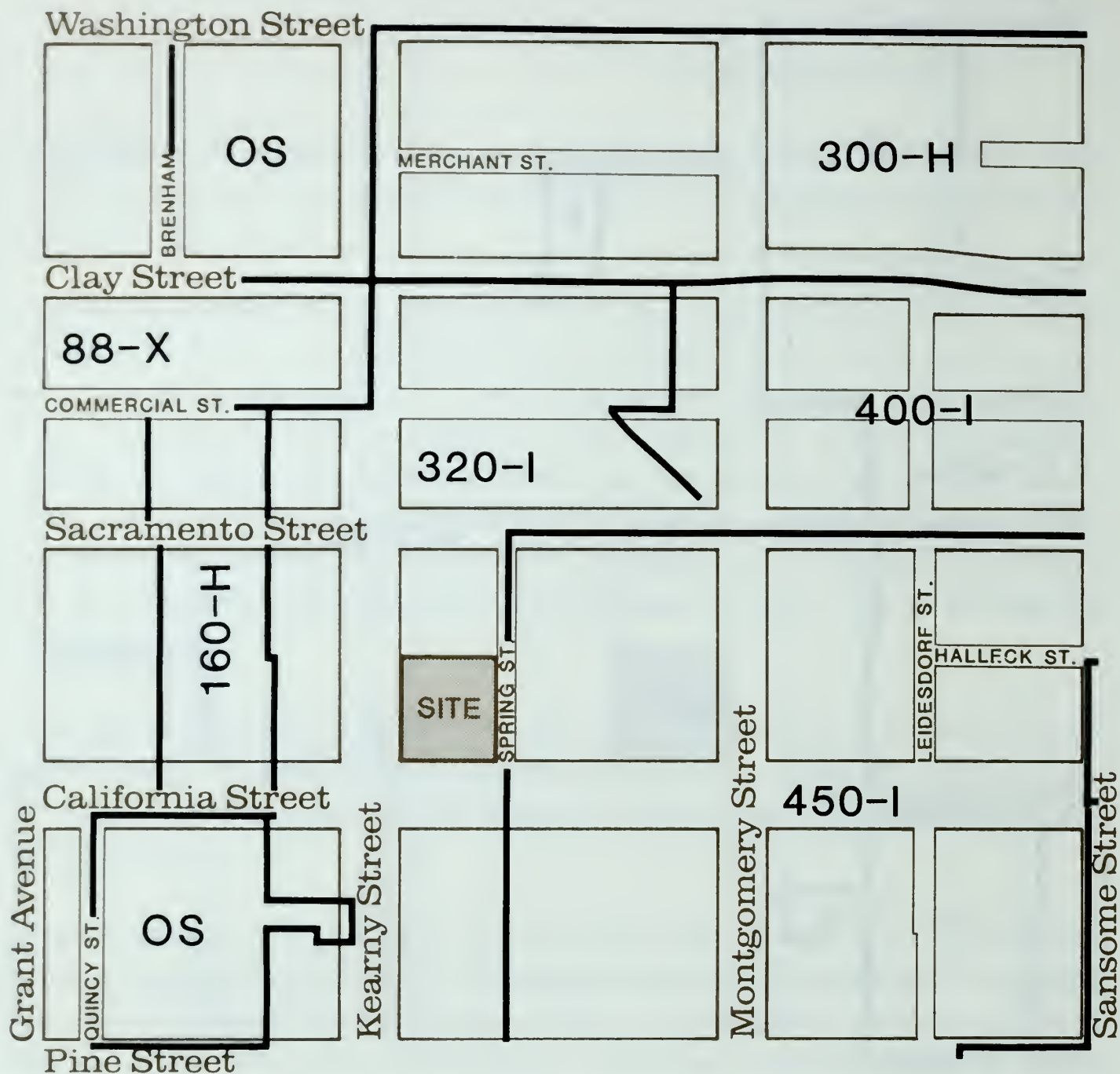
- C-3-G Downtown General Commercial District
- C-3-O Downtown Office District
- P Public Use District
-  Project Location



FIGURE 10: Planning Code Use Districts

SOURCE: San Francisco Planning Code



LEGEND


Height and Bulk Districts	Height Limit	Height Above Which Maximum Dimensions Apply	Maximum Building Length	Maximum Diagonal Dimension
450-I	450	150'	170'	200'
400-I	400	150'	170'	200'
320-I	320	150'	170'	200'
300-H	300	100'	170'	200'
160-H	160	100'	170'	200'
88-X	88	Bulk Limits Not Applicable		
OS	Conformity with Objectives , Principles and Policies of the Master Plan			
	Project Location			



FIGURE 11: Planning Code Height and Bulk Districts

SOURCE: San Francisco Planning Code

III. Environmental Setting

purposes, the 16.1 million gross sq. ft. of net new space is used, for it refers to the amount of new construction in excess of existing space on each site in terms of gross sq. ft. of floor space. If these projects were all completed, San Francisco would have a total of approximately 73 million sq. ft. of office space.

The above numbers and the cumulative analyses in this report are based on a list of office buildings, prepared by the Department of City Planning, which on August 6, 1982 were in one of three categories: 1) under formal review by the Department of City Planning; 2) approved but not yet under construction; and 3) under construction. These buildings and the total sq. ft. of office and retail space in each category are listed in Appendix B, Tables B-2 and B-3, pp. 247-250.

The cumulative list contains only those buildings which are, or have been, formally under review by the Department of City Planning and the Department of Public Works, or for which plans are well defined. Not included are projects which are in an early planning stage but for which details as to types of use and floor areas of office and retail space are not available. Thus excluded are buildings in the Yerba Buena Center Redevelopment Area, Mission Bay of the Southern Pacific Land Company, the Rincon Hill-South Beach Redevelopment Area, and unfunded State and Federal office building proposals. The cumulative list does contain those office buildings in the Yerba Buena Center Redevelopment Area which are under construction or for which Land Disposition Agreements have been approved, and which have definitely identified floor area figures. The San Francisco Redevelopment Agency is currently considering a range of additional amounts of office space, but the nature and scale, including floor area, are tentative and uncertain. Therefore, potential office space in Yerba Buena Center is not included. The general basis for future development will be in accordance with the Yerba Buena Center Redevelopment Plan as amended. Hotel projects have not been included in the cumulative analyses because hotel uses have different peaking characteristics from office buildings and generally do not significantly affect peak-hour traffic or transit. The reason for this methodology is more fully explained in Appendix F, p. 280. See also notes to Tables B-2 and -3.

The totals indicated in Table B-3 may differ from those shown in earlier EIRs as they are based on the status of projects as of August 6, 1982. Some projects included in earlier totals have been removed from the cumulative impact analyses because they have been withdrawn from formal review or for other reasons of inactivity. On the other hand, some

III. Environmental Setting

projects not included in earlier totals have been added to the cumulative totals because they have been activated. In sum, the lists used for the cumulative analyses in this report represent to the extent practicable the most current official record of office buildings completed, in progress, or in the review process.

This discussion of cumulative development describes in static terms a fluid situation. The environmental setting is in a constant state of flux and transition. (See Appendix B, pp. 243-244, for further discussion.)

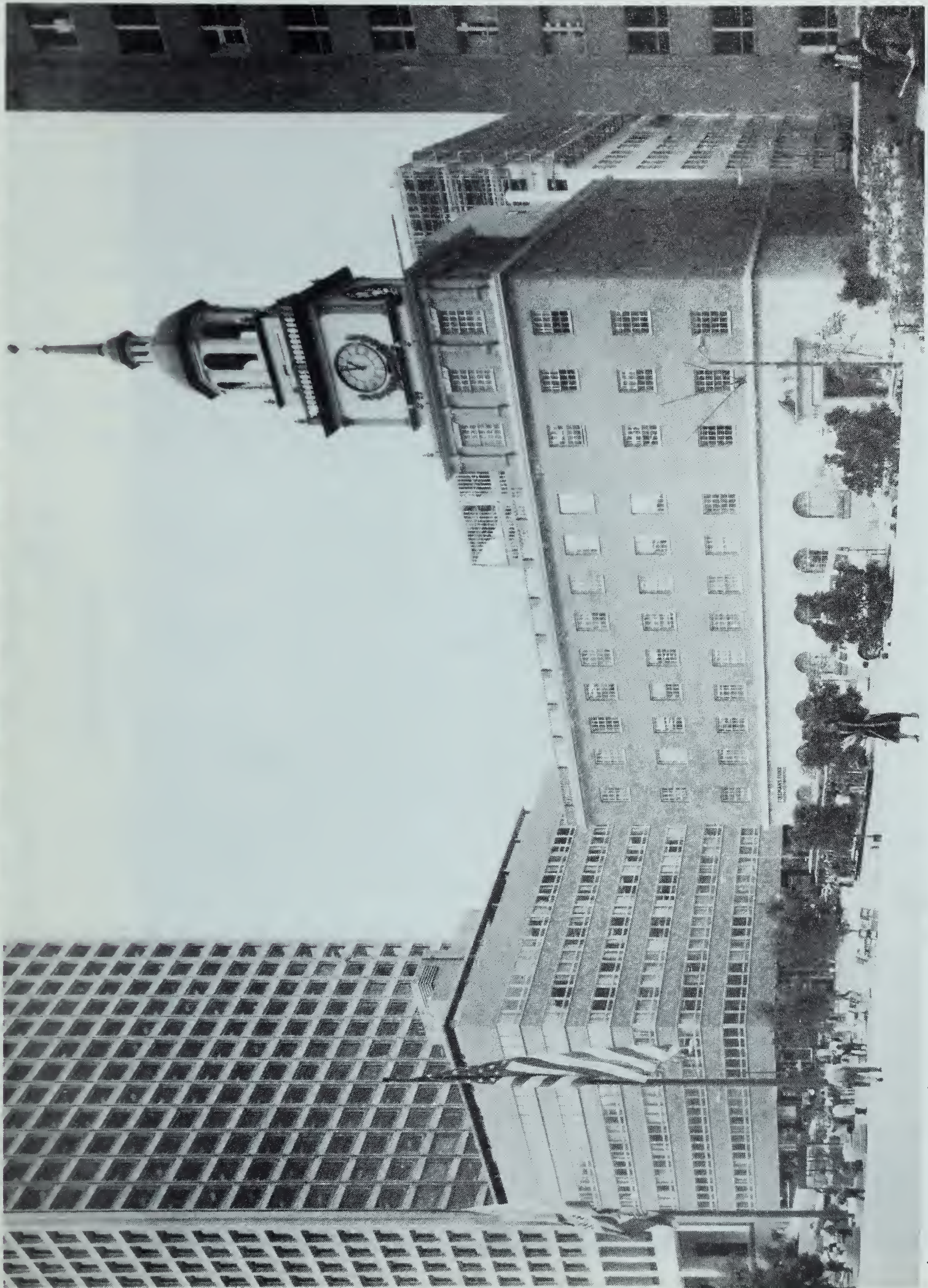
B. URBAN DESIGN

DESIGN

- The project site is occupied by a four-story brick building with a 120-ft. tall clock tower (see Figure 12, p. 27). The building is not rated by Heritage; it is rated "1" (on a scale of a high of "5" and a low of "0") by the Department of City Planning. The clock tower is reputed to be a replica of the clock tower of Independence Hall in Philadelphia. The site slopes up moderately to the west and contains no distinctive topographic features (see Figure 13, p. 28). There are street trees in sidewalk planters along the Kearny St. and California St. frontages, and shrubs in wooden boxes outside windows at the ground floor.

The project block, bounded by California, Kearny, Sacramento and Montgomery Sts., contains buildings at a variety of scales, providing visual contrast in the site vicinity. Large mid-rise office structures are located on the southern portion of the block (a 13-story building at 550 California St. and a 15-story building at 405 Montgomery St.). Smaller-scale development (ranging from 3 to 10 stories) occupies the northern portion of the block along Sacramento St. South of the site, across California St., is the 52-story Bank of America Building and plaza. A major change in topography occurs west of Kearny St. as the slope of California St. increases to the top of Nob Hill.

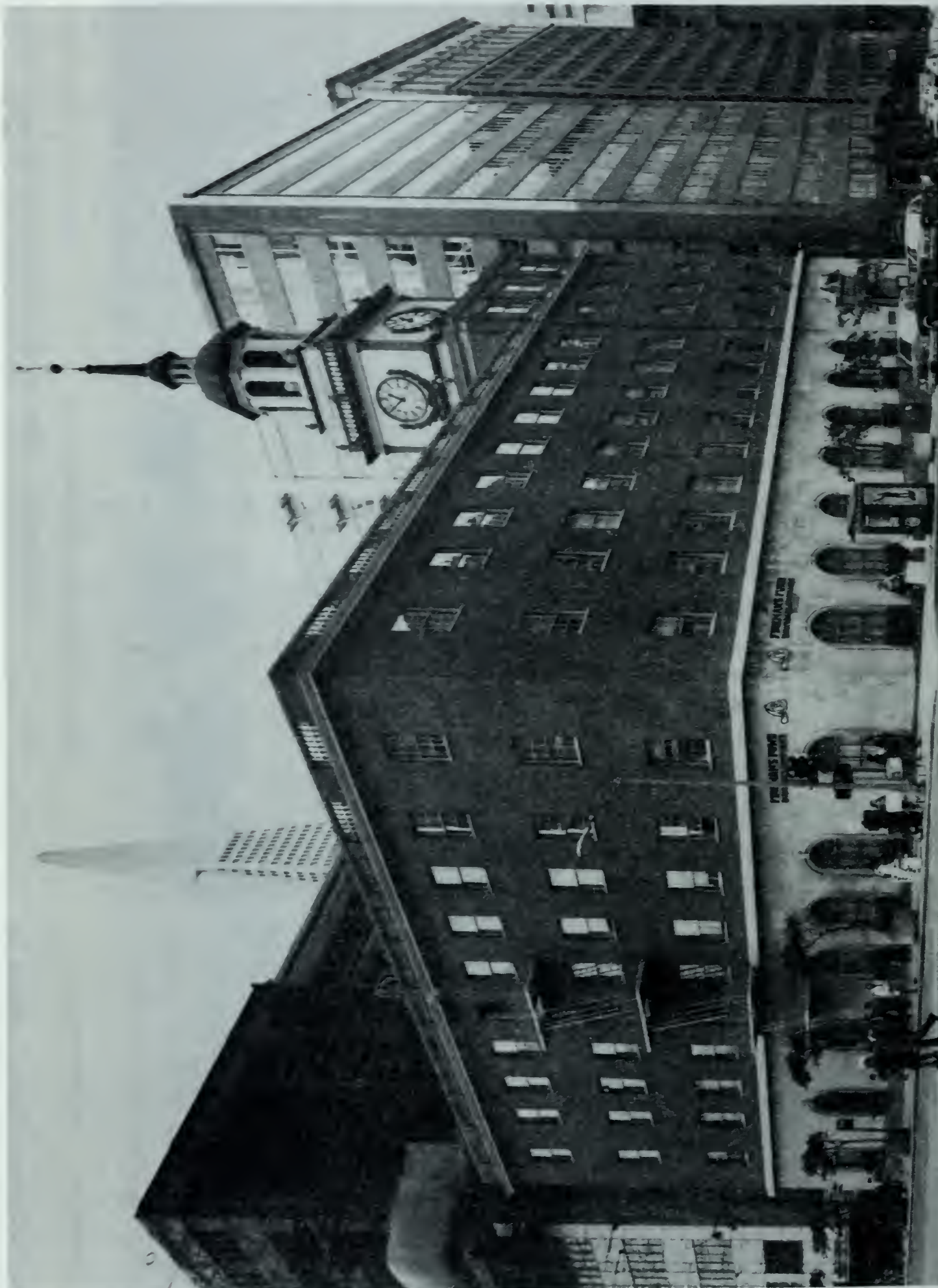
The site is in the northwest corner of the downtown office district and situated at the intersection of two major streets that run through the Financial District. Mid- to high-rise office buildings dominate the vicinity. North of the site, Kearny and Sacramento Sts. serve as a transition between the taller office developments of the Financial District to the east, south and northeast, the low- to moderate-scale structures of Chinatown to the west, and the Jackson Square Historic District to the north.



▲ 650 California St. ▲ 600 California St. ▲ Fireman's Fund Building -580 California St. ▲ Spring St. 550 California St. &

FIGURE 12: View of Site - California Street Frontage

SOURCE: Environmental Science Associates, Inc.



▲ 550 Kearny St.

▲ Fireman's Fund Building
580 California St.

▲ 550
California St.

▲ 401
Montgomery St.

SOURCE: Environmental Science Associates, Inc.

FIGURE 13: View of Site from California and Kearny Streets (looking Northeast)

III. Environmental Setting

Old and new developments are interspersed in the Financial District, providing a mix of architectural styles and textures. On California St., buildings are generally built out to the property lines (with the exception of the Bank of America plaza opposite the site and plazas at 50 California St. and 101 California St.), establishing a continuous street facade with a strong sense of spatial definition. Retail uses are few on California St. in the site vicinity; lobby areas and branch banks occupy the ground floor of most structures. Most buildings along Kearny and Montgomery Sts. have ground-floor retail uses.

SHADOWS

Light and shadow patterns on nearby streets and sidewalks are cast primarily by nearby high-rise structures. The buildings producing major shadows in the area include the Bank of America Headquarters Building (555 California St.), 650 California St., and the Liu Chong Hing Bank Building (601 California St.). Shadows from the existing structure on the site are confined to nearby street segments and the lower portions of adjacent buildings.

WIND

Wind conditions in San Francisco are a determinant of pedestrian comfort on sidewalks and in other public areas. In the Downtown, flat-walled buildings can funnel wind flows into narrower areas, increase air turbulence, and divert winds downward to street level.

West, southwest and northwest winds are the most frequent and strongest winds during all seasons in San Francisco./1/ (In meteorology, a west wind blows from the west.) The most frequent wind direction during most months is west; on an annual aggregate basis, west winds blow nearly half of the time. West winds are also the strongest, averaging over seven miles per hour year-round. Southwest winds are typically the second most frequent and second strongest winds. Northwest winds have had the second highest average speed during some years.

Average wind speeds are highest during the summer and lowest during the winter. The strongest peak winds occur, however, during the winter when average speeds for one hour of 27 miles per hour or more have been recorded. The highest average wind speeds are in the mid-afternoon, and the lowest are in the early morning. Peak winds are distributed evenly throughout the day.

III. Environmental Setting

Section IV, Environmental Impacts, p. 56, contains a description of the wind flow patterns surrounding the project site.

NOTES - Urban Design

/1/ This discussion of wind speeds and directions is based on: U.S. Weather Bureau data, collected at 460 California St. near Montgomery St.; and Bay Area Air Quality Management District data, collected at 939 Ellis St. near Van Ness Ave., about 1.2 miles southwest of the site.

C. EMPLOYMENT, HOUSING AND FISCAL FACTORS

EMPLOYMENT

Site History/1/

Since about 1959, the 580 California St. Building has served as the San Francisco branch office of the Fireman's Fund Insurance Company, which is headquartered at 3333 California St. Over the years, branch operations outgrew the space at 580 California St., requiring that several branch departments relocate to other offices in downtown San Francisco. To consolidate all branch offices into one location, Fireman's Fund leased space in the One Market Plaza building to accommodate existing and future office space needs for branch operations. Beginning in 1979, branch employees began moving into offices at One Market Plaza; all branch employees will be located in One Market Plaza by the end of 1982.

The Fireman's Fund headquarters offices at 3333 California St. will move to Novato, in northern Marin County, beginning in October 1982. Relocation of the branch and headquarters offices is not a result of the proposed project; each move is for the purpose of consolidating operations.

On-site Employment

Approximately 225 Fireman's Fund employees currently work at the project site./1/ All employees are office workers; no retail space exists in the building. About 80% of the total building floor area is currently occupied. The remaining 20% of floor area is vacant due to employee relocation. The 225 employees will move to either the One Market Plaza Building or the Novato offices by the end of 1982.

SAN FRANCISCO AND REGIONAL OFFICE SPACE MARKET

Existing and Proposed Office Space

San Francisco is the major office center in the Bay Area with approximately 57.2 million gross sq. ft. of office space (see Table B-1, Appendix B, p. 245).^{/2/} During the 1970s, space in downtown office buildings was added at a rate of about 1.5 million sq. ft. per year. In 1981 and 1982, the average rate of office space additions was about two million gross sq. ft. annually. Office buildings with a total space of approximately 32.3 million sq. ft. were constructed between 1960 and 1981.^{/2/}

Vacancy Rates/Commercial Rents

Based on a 1981 survey of about 290 buildings, the San Francisco Building and Owners Association (BOMA) reports a citywide vacancy rate of 1.04%.^{/3/} According to a June 1982 Coldwell Banker survey, the vacancy rate in downtown San Francisco office buildings (new, existing and major renovations) was 3.4% between March 31, 1982 and June 30, 1982.^{/4/} The 3.4% rate is an increase from 0.1% during the same period in 1981 and is the highest that has been reported since Coldwell Banker started this survey in 1978. The current 3.4% vacancy rate is the fourth lowest in the nation among major downtown financial districts.^{/4/} For comparison, the June 30, 1982 vacancy rate is 6.9% nationally; 6.4% for Chicago; 2.6% for downtown Manhattan; and 3.9% for Dallas.

Grubb and Ellis reports an August 1982 downtown vacancy rate of 10% for first-class office space of 25,000+ sq. ft.^{/5/} The Coldwell Banker and Grubb and Ellis vacancy rates are not directly comparable, as each survey includes different numbers and types of buildings. Both surveys, however, indicate an upturn in the downtown office vacancy rate. The recent, short-term increase in the downtown vacancy rate does not represent a historical trend, and may be attributable to several factors, including an increase in the amount of available office space (due to new space being completed and space available for sublease), a short-term decrease in the demand for office space, and the national economic recession.

- One effect of the historical shortage of office space in San Francisco has been to stimulate office development and increase demand for existing office space elsewhere in

III. Environmental Setting

the Bay Area. Some businesses move their clerical, support, and non-corporate functions to outlying areas while maintaining headquarters and main branch offices in San Francisco. The City of Oakland and San Mateo and Contra Costa Counties, in particular, are experiencing increased demand from businesses relocating from San Francisco. For example, approximately 6 million sq. ft. of office space in nine new buildings are currently proposed for construction in the City of Oakland over the next 10 years, perhaps 27.2 million sq. ft. of office and retail area is projected in Contra Costa County and 13.5 million sq. ft. of office and 1.8 million sq. ft. of retail area is projected for the Highway 101 corridor in San Mateo County./6/

Due to historically high demand, annual rents for commercial office space in the downtown Financial District have almost tripled in the last decade (from \$8.50 per sq. ft. in 1970 to \$23 per sq. ft. in 1980)./7/ High quality, new space currently leases for \$25 to \$35 per sq. ft. annually./8/ Current rents in older buildings in the Financial District are less expensive, averaging between \$10 and \$15 per sq. ft. Existing, converted and rehabilitated commercial office space located South of Market rents for between \$12 and \$15 per sq. ft.; new South-of-Market office space will rent for about \$23 per sq. ft./9/ San Francisco rents of \$25 to \$35 per sq. ft. are now about 35% higher than commercial rents in Oakland (\$17 to \$20 per sq. ft.); the Peninsula (\$18 to \$22 per sq. ft.) and Contra Costa County (\$18 to \$20 per sq. ft.)./8,9/ Should the recent rise in vacancy rates continue, current and future commercial rents would be expected to decline proportionately in San Francisco and outlying areas.

HOUSING

Both regional and San Francisco housing stock are characterized by low growth rates, low vacancy rates, and high purchase and rental costs in relation to typical wages paid. This combination of factors and high mortgage costs have tended to constrict the supply and affordability of housing in San Francisco.

- San Francisco had about 322,000 housing units as of the end of 1980; about two-thirds of the housing stock is rented and one-third is owner occupied./10/ The number of new single- and multiple-housing units in San Francisco (authorized by building permits) decreased 34.4% between 1979 and 1980./11/ The average 1980 market value of a single-family house was \$140,000 in the Bay Area and \$148,000 in San Francisco./12/ The 1980 Census reports a 1980 median value of \$104,600 for single-family units (not including condominiums), and a vacancy rate of 0.6%./13/ The 1980 Census reports a 1980

III. Environmental Setting

median rental rate of \$267 per month; adjusted for inflation this becomes \$310 per month. The Department of City Planning reports a rental housing vacancy rate of 2.67%, which is derived by dividing the vacant rental units by the entire housing stock. The 1980 Census reports a rental vacancy rate of 4.2%, which is derived by dividing the vacant rental stock by the entire rental stock./13/

FISCAL

Property Tax Revenues

The site has a 1981-82 assessed valuation of about \$4.6 million./14/ Based on the 1981-82 non-bond tax rate of \$1.00 per \$100 of assessed valuation, the site will generate approximately \$46,170 in total non-bond property tax revenues this fiscal year. The largest portion, \$36,660 or 79%, will be distributed to the City and County of San Francisco; about \$6,465 to the San Francisco Unified School District; \$90 to the Bay Area Air Quality Management District; and \$2,955 to BART./15/ The existing site will also generate a total of \$8,800 to retire bond debts, based on the 1981-82 bond payment rate of \$0.19 per \$100 of assessed valuation./14/

Business Taxes

Fireman's Fund Insurance Company, by State Constitution Article XII, 14-4/5, is exempt from paying local business taxes (payroll, gross receipts and utility taxes). Instead of local business taxes, Fireman's Fund pays an in-lieu premium tax to the State Department of Insurance, which distributes the monies directly to the State General Fund./15/ The City and County of San Francisco receives a portion of the in-lieu premium tax revenue indirectly from the project site because portions of the State General Fund are reallocated back to the City and County. The amount of this revenue cannot be reliably estimated.

Costs and Net Revenues

The City incurs costs in serving the existing buildings. Police, fire and general government expenditures are supported primarily by the General Fund. Most street maintenance, street improvement, and traffic control costs are supported by other revenue sources such as fees, fines, and federal and state aid, which have been declining.

NOTES - Employment, Housing and Fiscal Factors

/1/ William Newberry, Manager, Real Estate Department, American Express Company, telephone communication, April 28, 1982. (Fireman's Fund Insurance Company is a wholly owned subsidiary of American Express Company.)

III. Environmental Setting

- /2/ San Francisco Department of City Planning, "Major Office Building Construction in San Francisco, As of August 1, 1982, In Gross Square Feet"; and "Cumulative Office Development in Downtown San Francisco As of August 6, 1982"; and "Gross Square Feet of Cumulative Office and Retail Development in Downtown San Francisco as of August 6, 1982". See Appendix B, Table B-1, Table B-2 and Table B-3, pp. 245-250. Buildings on these lists are located in the C-3 district, the Van Ness corridor west to the Central Freeway, the South of Market area south to the Central Freeway, Division Street, Mission Creek, and China Basin, and the northeastern waterfront below Telegraph Hill.
- /3/ Elmer Johnson, Director, Buildings and Managers Association, telephone communication, May 6, 1982.
- /4/ Coldwell Banker, "Office Vacancy Index of the United States," June 30, 1982. San Francisco vacancy rates are part of a national survey of 24 major downtown districts conducted quarterly. A copy of the June 30, 1982 survey is on file and available for public review at the Office of Environmental Review, 450 McAllister St., Fifth Floor.
- /5/ William J. McCubbin, Senior Vice President/District Manager, Grubb and Ellis, telephone communication, September 7, 1982.
- /6/ City of Oakland, Department of City Planning; "Major Buildings in the Central District," January 26, 1982; People for Open Space, October 1982, Proposed East Bay Office/Industrial Development; and Metropolitan Transportation Commission, September 17, 1982, Draft Report - Travel Impacts of Proposed Development on the Peninsula along Route 101.
- /7/ Department of City Planning Memorandum to the City Planning Commission, "South of Market Interim Controls," January 26, 1982.
- /8/ Derek Morris, Leasing Agent, Cushman and Wakefield, telephone communication, May 7, 1982; Valerie Miles, Senior Broker, Coldwell Banker, Oakland Office, telephone communication, April 23, 1982; and Jeffery Nebel, Leasing Agent, Coldwell Banker, telephone communication, April 30, 1982.
- /9/ Assuming that demand remains relatively constant, rents in outlying areas are expected to increase in 1983 and 1984 as new space comes on line. One reason for the comparatively low rents in outlying areas is the lack of competitive space available. For example, new buildings in Oakland are expected to lease for \$24 per sq. ft. in 1983, which will be comparable to rent for new buildings in the South of Market area. (Valerie Miles, Senior Broker, Coldwell Banker-Oakland Office, telephone communication, April 23, 1982.)
- /10/ Michael Estrada, Planner, Department of City Planning, telephone communication, April 30, 1982; and Department of City Planning, Residence Changes in the San Francisco Housing Inventory, 1978, September 1979.
- /11/ Real Estate Research Council of Northern California, Northern California Real Estate Report, vol. 33, No. 1, April 1981.
- /12/ Security Pacific Bank, "Monthly Summary of Business Conditions - Northern Coastal," March 31, 1981, p. 2.
- /13/ Dean Macris, Director of Planning, Department of City Planning, Memorandum entitled "1980 Census Information," March 25, 1982.

III. Environmental Setting

/14/ San Francisco Controller's Office.

/15/ City and County of San Francisco, Tax Collectors Ruling No. 2; and Levy LaCuesta, Bureau Supervisor, State Department of Insurance, telephone communication, May 6, 1982.

D. TRANSPORTATION

TRANSIT

The downtown area is served by electric trolley, diesel bus, light-rail vehicle and cable car lines of the San Francisco Municipal Railway (Muni). The California St. cable car line runs past the site and the 15-Third bus line travels on the Kearny St. and Montgomery St. frontages of the project block. Regional service is provided to and from the East Bay by the Bay Area Rapid Transit District (BART) at the Montgomery Station on Market St. four blocks south of the site and by the Alameda-Contra Costa (AC) Transit District buses from the Transbay Transit Terminal. Peninsula service is provided by the Caltrans Peninsula Train (Southern Pacific Transportation Company) from the terminal at Fourth and Townsend Sts. and by the San Mateo County Transit District (SamTrans), which has bus routes and stops along various streets in the area, including Montgomery St., and transfer connections at the Daly City BART Station. The Golden Gate Bridge, Highway and Transportation District (Golden Gate Transit) provides peak-period bus service to Marin and Sonoma Counties from a.m. stops on Battery and First Sts. near Market St., and p.m. stops on Pine and Sansome Sts. Golden Gate Transit also provides ferry commute service to terminals in Larkspur and Sausalito from the Ferry Building; Harbor Carriers, Inc. provides service to Tiburon. Golden Gate Transit operates a van-pooling program to North Bay areas. There are currently about 70 van pools commuting to San Francisco from Marin and Sonoma Counties; most of these commute to the Financial District. A car pooling program, RIDES for Bay Area Commuters, provides leasing and matching services for establishing van and car pools. Independently owned and operated jitneys provide additional transit service on Mission St. during the peak commute hours.

Muni

California, Kearny, and Montgomery Sts., which form the southern, western, and eastern boundaries of the project block, are Transit Preferential Sts. on which the flow of Muni vehicles is to be expedited. Kearny and Montgomery Sts. are also designated Transit Arterial Streets.^{/1,2/} California St. is a cable car route (line 61). Peak-hour headways between cable cars on California St. (outbound or inbound) are now about 5-6 minutes; average peak-hour headways on the 15-Third bus line on Kearny St. (northbound) and Montgomery St. (southbound) are 4 minutes.^{/3/} On Sacramento St., the 1-California bus line operates with 3-minute headways during peak hours.^{/3/}

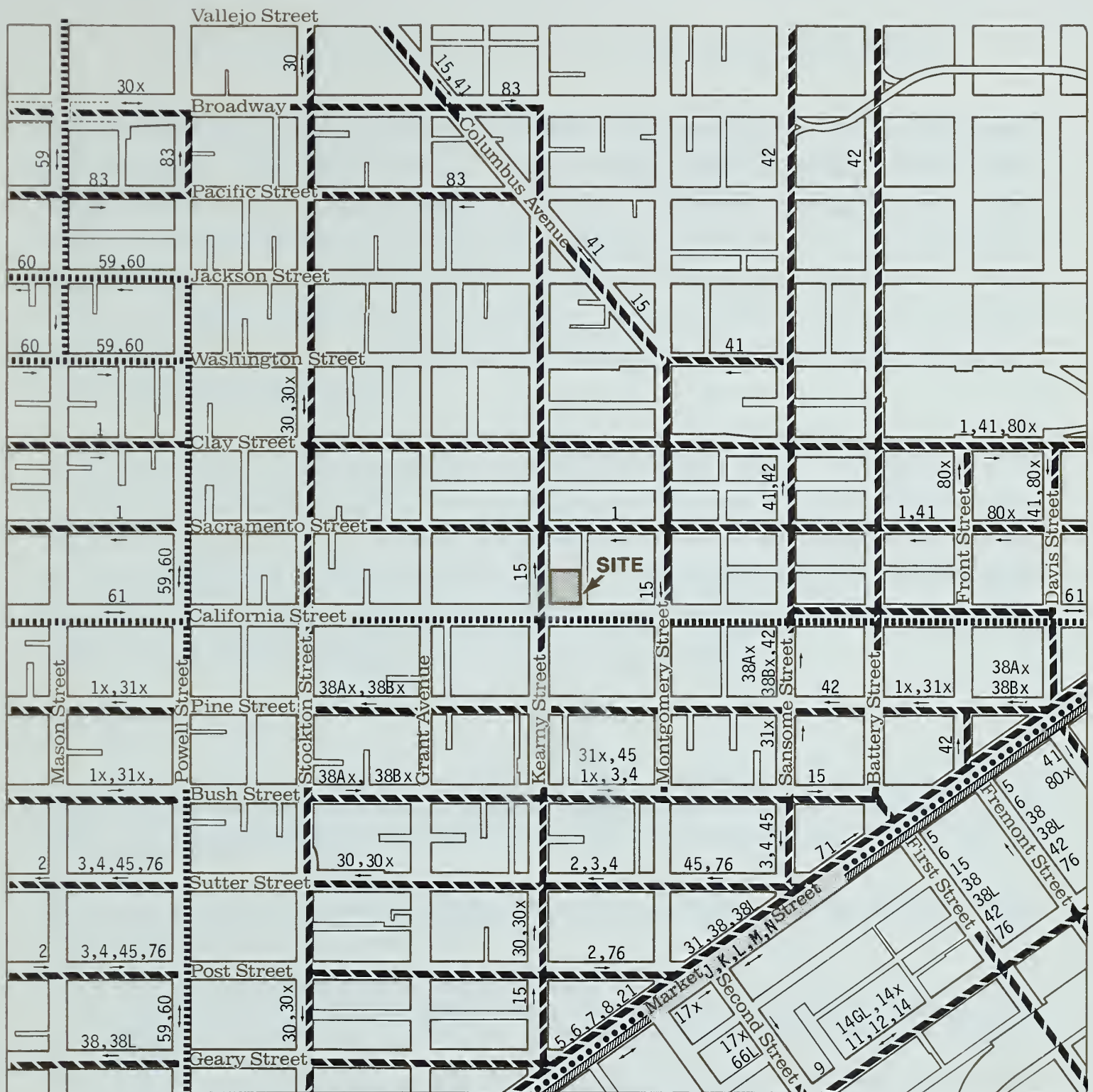
III. Environmental Setting

Muni has plans to increase the capacity of its downtown service in several ways. Twenty-two additional light rail vehicles (LRVs) are on order for use in the Muni Metro System. Construction of a loop to replace the existing stub-end terminal at The Embarcadero is planned, with a possible surface extension on The Embarcadero; implementation is partly contingent upon federal funding, which has not yet been secured. Also planned is the introduction of 50 to 100 articulated buses with a capacity 50% larger than conventional buses. Procurement efforts on the new buses began in September 1982. Further integration of BART into the downtown transit system is scheduled for implementation in November 1982, when Muni Fast Passes will be accepted for travel on BART trains within San Francisco. System-wide capacity is planned to be increased 19% by 1991./4/ The increase in capacity is planned to approximately match the increase in demand, so that present operating conditions, such as excessive crowding on some vehicles, are not expected to improve.

The project site, four blocks north of Market St., is well located for access to transit lines (see Figure 14, p. 37). All Muni Metro Light Rail Vehicles (LRV) and BART lines serve the site from the Montgomery subway station on Market St. Thirty-eight Muni bus and trolley lines stop within 2,000 ft. (walking distance) of the site. The Transbay Terminal and the Ferry Terminal are seven to eight blocks away and can be reached via the 15-Third line on Montgomery St. and the California St. cable car line, respectively. Bus service to the Southern Pacific Depot is available within two blocks via Routes 41, 42 and 15.

Muni has established maximum recommended passenger loadings (a load factor of 1.0) that are used as a basis for scheduling peak-hour trips on each route, which are equivalent to 150% of seated capacity. Loading in excess of the recommended maximum increases passenger loading time, reduces schedule adherence, and provides a low level of passenger comfort. Figures F-1 to F-3, Appendix F, pp. 284-286, show peak-hour conditions on several congested Muni lines and Table 7a, p. 77a, summarizes conditions on Muni lines in the area.

The Muni Five-Year Plan outlines a program for integrating Muni and regional service. Programs for improving route structures, collection procedures, and regional transfer coordination are planned which would increase the percentage of non-San Francisco residents (presently 10%) making use of Muni. These programs would primarily affect trips to non-downtown locations and the other eight Bay Area counties./5/



LEGEND






-  BART and Muni Metro Station
-  BART Route
-  Muni Metro Subway
-  Surface Bus Route
-  Cable Car Route
- 1,2,3,J,K Route Designation
- Direction of Transit Vehicle Travel



FIGURE 14: Muni and BART Routes in the Project Area

SOURCE: Environmental Science Associates, Inc., using San Francisco Municipal Railway Interim Map, January, 1982

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removed by projects presently under formal review: Columbus/Pacific Savoy, 388 Market St., 333 Bush St. and 71 Stevenson St. When the accumulation of parked vehicles in the garages in the project vicinity reaches its peak at late morning or early afternoon, only about 690 spaces (4%) are vacant in the entire area. Vacant spaces are not immediately found and filled by drivers seeking to park, so there is a de facto vacancy rate of a few percent, regardless of the extent to which parking demand exceeds the supply. It may be stated that essentially no opportunity exists to increase the number of parked vehicles in public parking garages in the area.

At the project site, a red curbside zone is in effect on California St. extending about 70 ft. east of the Kearny St. corner. In the remaining curbside space west of Spring St. are three metered spaces, subject to a 4-6 p.m. tow-away zone. On Kearny St. at the site are two metered spaces in a yellow (loading) zone; the remaining curbside space at the corner is used as a far-side stop for Muni's 15-Third bus line. Parking on Spring St., the alley which forms the eastern boundary of the project site, is prohibited.

NOTES - Transportation

/1/ Transit Preferential Streets are streets where interference with transit vehicles by other traffic should be minimized. Transit Arterials are routes of major arterial transit lines. (Transportation Element of the Comprehensive Plan, adopted by the City Planning Commission, April 27, 1972)

/2/ Transit preferential measures specified in the San Francisco Municipal Railway, April 1980, Five Year Plan: 1980-85, are as follows:

- 1) creation and enforcement of exclusive transit lanes;
- 2) synchronization of traffic signals with the speed of transit vehicles rather than the speed of automobiles, and the use of signal devices which can be preempted by transit vehicles;
- 3) extension into the street of sidewalk curbs at bus stops so that buses may pick up passengers without having to leave and re-enter the lane of travel; and
- 4) enforcement of traffic and parking regulations which facilitate the movement of transit vehicles.

/3/ San Francisco Municipal Railway, January 27, 1982, Guide to Frequency of Service.

/4/ San Francisco Municipal Railway, 1982, Rehabilitation and Replacement Plan.

/5/ Information to be found in the Municipal Railway Five-Year Plan: 1981-86.

/6/ This discussion is based on observations made between 4:30 and 5:30 p.m. on Thursday, April 8, and on Wednesday, April 14, 1982. Observations were also made between 12:00 and 1:00 p.m. on Monday, April 12, 1982. The analysis follows methods described in the book Urban Space for Pedestrians, by Boris Pushkarev and Jeffrey Zupan.

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/7/ This discussion is based on observations made Wednesday, April 14, 1982. The estimates of capacity consider the existing signal timing on each approach.

/8/ The parking inventory survey was conducted on November 5, 10, 13 and 17, 1980, and January 20-23 and 26, 1981 (all weekdays) between the hours of 10:00 a.m. to noon and 1:00 to 3:00 p.m. by TJKM, Transportation Consultants.

E. AIR QUALITY

The nine-county San Francisco Bay Area Air Basin is designated by the California Air Resources Board (CARB) as a nonattainment area for ozone and carbon monoxide (CO); the air basin is also a nonattainment area for total suspended particulate (TSP),/1/ but San Francisco County meets the TSP standards./2/ (Total suspended particulates can be a problem around construction sites, causing a "spot" violation of the standards, without causing the standard to be exceeded for a particular county or air basin.) As required by the Federal Clean Air Act Amendments of 1977, a regional Air Quality Plan has been adopted which establishes control strategies to attain and maintain the various standards by 1987./3/ These strategies include stationary and mobile source emission controls and transportation improvements to be implemented by the Bay Area Air Quality Management District (BAAQMD), Metropolitan Transportation Commission (MTC), and the CARB.

The BAAQMD operates an air quality monitoring station approximately 2.3 miles to the south of the site at 900 23rd St. A three-year summary of the data collected and the corresponding ambient air quality standards are shown in Appendix G, p. 291. These data show occasional excesses of the most stringent ozone, CO, TSP, and nitrogen dioxide standards.

Highest annual pollutant concentrations in San Francisco, while exhibiting fluctuations due to variations in meteorology, have shown an overall improvement during the 1971-1980 period./2/ No similar trend in the annual number of standards excesses is evident. Such excesses are infrequent.

San Francisco's air quality, in general, is the least degraded of all the developed portions of the Bay Area. Because of the prevailing westerly and northwesterly winds, San Francisco is more a generator of its own air quality problems (especially CO and TSP) and a contributor to those in other parts of the Bay Area (especially ozone), than a recipient of pollutants from elsewhere. This is because CO and TSP concentrations reflect local

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emission sources and concentrations are highest at the source and decrease as the pollutants are dispersed by wind. In contrast, ozone is not directly emitted but is a secondary pollutant formed in the atmosphere by a complex series of photochemical reactions involving emitted hydrocarbons and nitrogen oxides. Ozone air pollution is thus a regional phenomenon because the precursor pollutants are carried downwind as the reaction process occurs.

NOTES - Air Quality

/1/ A nonattainment area is one in which the federal ambient air quality standard for the designated pollutant has been exceeded within the past two to three years.

/2/ Paul Brand, Information Officer, BAAQMD, telephone communication, August 11, 1982.

/3/ Association of Bay Area Governments (ABAG), BAAQMD, and Metropolitan Transportation Commission, July 1982, 1982 Bay Area Air Quality Plan, San Francisco Bay Area Environmental Management Plan.

F. ENERGY

Electricity and natural gas are provided to San Francisco by Pacific Gas and Electric Company (PG&E). New demands for electricity in northern California will be met primarily from coal, nuclear, and hydroelectric sources. Co-generation and additional geothermal power development will also be used to supplement existing supplies. Among the major new power plants expected by PG&E are the Diablo Canyon nuclear plant and the Helms Pump Storage hydroelectric plant. Both projects are expected to have their first units come on line in December 1982 (Diablo Canyon must first receive an operating permit from the Nuclear Regulatory Commission). PG&E also anticipates increased purchases of electricity from other utilities. This power is expected to come from surpluses generated by hydroelectric and nuclear plants in Washington State. These surpluses are uncertain due to the recent cancellation of plans for two of the five Washington Public Power Supply System nuclear plants and the delay in construction of another, as well as long-term increased local demand for energy in the Pacific Northwest./1/

The City of San Francisco presently generates sufficient electricity for its own uses through the Hetch Hetchy system; this power is sold to and distributed by PG&E. Two additional hydroelectric projects and four expansions are proposed by Hetch Hetchy for

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the Tuolumne and Clavey Rivers. In the next several months, Congress is expected to consider granting Wild and Scenic River status to the Tuolumne River; passage of such an Act could prevent the construction of several of these hydroelectric projects.

The Fireman's Fund Insurance Building, containing a total of about 82,000 sq. ft., was constructed in 1950, before present state energy standards were implemented. In 1981, energy consumption was about 758,000 kilowatt hours (KWH) of electricity and about 21,000 therms of natural gas, for a total of about 10 billion Btu at-source./2,3/ This represents a total consumption of approximately 155,000 Btu at-source per sq. ft. per year.

NOTES - Energy

/1/ Future Generating Facilities and Changes to Existing Facilities (Form R-6), Pacific Gas and Electric Company, April 1, 1982.

/2/ Sandra Nelson, Assistant to William F. Newberry, Manager Real Estate, American Express Company, letter communication January 27, 1982, and William F. Newberry, letter communication, January 19, 1982.

/3/ Btu, British thermal units, a standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (251.98 calories) at sea level. The term 'at-source' means that adjustments have been made in the calculation of the Btu energy equivalent to account for losses in energy which occur during generation and transmission of the various forms of energy.

IV. ENVIRONMENTAL IMPACTS

An Initial Study of the proposed project was published April 23, 1982, and a determination was made that an Environmental Impact Report (EIR) was required. Issues that were considered to require no further discussion as a result of the Initial Study include: land use compatibility; project visibility; operational noise; construction-related air quality; public services and utilities; biology, geology and hydrology; health hazards; and cultural and historic factors. Therefore, this EIR does not discuss the above issues. The Initial Study is incorporated herein as Appendix A, p. 223, and may be referred to for a discussion of these issues. Not all of the impacts discussed in this section are physical environmental effects as defined by the California Environmental Quality Act (CEQA). They are included here for informational purposes only.

A. LAND USE AND ZONING

The project would satisfactorily respond to general objectives of the San Francisco Comprehensive Plan, and to the objective stated in Article 2, Section 210.3 of the City Planning Code, that the C-3-0 Downtown Office District play a leading national role in finance, corporate headquarters and service industries and serve as an employment center for the region. The project would be consistent with Objective 6 of the Commerce and Industry Element to support San Francisco as a "prime location for financial, administrative, corporate, and professional activity", and would respond to Policies 2 and 4 of Objective 6 of the Commerce and Industry Element to "maintain a compact downtown core" and, to provide "amenities for those who will live, work and use the Downtown." These policies will not be further discussed in the EIR. The relationship of the project to the Urban Design Element of the Comprehensive Plan is discussed in Table 3, pp. 53-55. The project would satisfactorily respond to these policies. The project would not respond to a policy of the Downtown Parking Plan of the Transportation Element of the Comprehensive Plan which discourages new parking facilities in the downtown core automobile control zone. The project would not respond to a policy of the Transportation Element through the use of subsurface sidewalk space. The project would satisfactorily respond to other policies of this Element (see Section IV.D, p. 72).

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The project would require demolition of one four-story structure and construction of the proposed 23-story building. The project would increase the density of development on the site, adding about 259,500 gross sq. ft. of new office space and 10,500 gross sq. ft. of retail and lobby space. The variety of uses on the site would increase; the project would replace exclusive office use in the existing building with a mixed-use (office and retail) structure. The number of office workers employed on the site would be increased by the project. In addition, pedestrian activity at the site would increase due to persons (tenants and nontenants) patronizing the ground floor retail establishments.

The 320-ft. project tower would be the maximum height permitted in the 320-l Height and Bulk District. The building length would be about 124 ft., about 45 ft. less than the maximum length of 170 ft. permitted above 150 ft. in height (the site dimensions disallow the possibility of exceeding the bulk limitations). The diagonal dimension of about 175 ft. would be about 25 ft. less than the permitted maximum dimension of 200 ft.

Gross floor area of the project would be approximately 340,000 gross sq. ft., representing a floor area ratio (FAR) of about 21.3:1. The basic FAR permitted in the C-3-0 district by Section 124 of the City Planning Code is 14:1. Under Section 127(a) of the Code, the project sponsor intends to purchase and transfer to the site about 116,000 sq. ft. of basic permitted floor area: about 69,000 sq. ft. would be transferred from Lot 16 of Assessor's Block 240 (Cahill Property - 550 Kearny St.); and about 47,000 sq. ft. would be transferred from Lot 18 of Assessor's Block 240 (Utah International Property - 550 California St.). Both of these lots are adjacent to the project site, as required by the Section 127(a) for the transfer of basic permitted floor area. The transfer of basic permitted floor area under Section 127(A) would not alter the overall development potential for the project block. The floor area increase on the project site resulting from the transfer would be directly proportional to a decrease in development potential on the adjacent parcels from which the transfer would be made. No special action would be required of the City Planning Department or Commission to permit the floor area transfer. Upon purchase of the permitted gross floor area by the project sponsor, notice of the transfer would be recorded with the deeds of all affected properties.

- The proposed building foundation and subsurface parking level would extend beneath the Kearny St., California St. and Spring St. sidewalks. A revocable encroachment permit, to allow the use of subsurface space beneath public sidewalks, would be applied for with the

IV. Environmental Impact

building permit. The building foundation and parking facility would use only subsurface public space and would not interfere with utility lines beneath the streets. The Urban Design Element of the Comprehensive Plan contains Policies for Conservation which maintain a presumption against giving up street areas for private use. The project would conflict with Objective 2, Policy 9 criteria for review of proposals to release street areas, because providing parking on the project site would be contrary to the Transportation Element policy which discourages new long-term parking in the Downtown. The encroachment permit would respond to Policy 10 which permits release of street space in the least permanent manner, such as issuance of a revocable permit in preference to a street vacation. According to Section 310.1 of the San Francisco Building Code, the encroachment permit application would require approval from the Superintendent of the Bureau of Building Inspection and City Engineer. This item would be subject to review by the City Planning Commission under Master Plan referral.

The one level of subsurface valet parking would contain about 8,600 net sq. ft. (exclusive of ramps, mechanical space and elevator core area) and would accommodate about 35 passenger vehicles. The amount of proposed parking could be permitted as an accessory use for the project. Up to seven percent of the gross building floor area, about 23,800 sq. ft., could be permissible as accessory parking under Section 204.5 of the Code; this would be about 15,200 sq. ft. more than the parking area proposed for the project.

Three off-street loading spaces would be provided. The off-street loading plan would exceed the minimum requirements of Section 154(b) of the City Planning Code. The number and dimensions of loading spaces would conform to the requirements of City Planning Commission Resolution No. 9286 (three spaces, 35 ft. deep and 12 ft. wide each)./1/

Guiding Downtown Development

In July 1982, the Department of City Planning published Guiding Downtown Development (GDD), a report containing a series of regulatory proposals for managing development in downtown San Francisco. (See Section VI. for an alternative conforming with the considerations contained in GDD.) Table 2, p. 46, compares existing development controls contained in the City Planning Code, proposed changes in those requirements contained in GDD, and relevant characteristics of the proposed project. GDD proposes that the basic

TABLE 2: COMPARISON OF EXISTING DEVELOPMENT CONTROLS TO PROPOSED CHANGES CONTAINED IN GUIDING DOWNTOWN DEVELOPMENT, JULY 1982

Major Development Controls Pertaining to Project Site	Present Requirements- City Planning Code and Interim Controls	Proposed Requirements- Guiding Downtown Development	Proposed Project
Base FAR	14:1	12:1 (additional 5:1 available for housing).	21.3:1 commercial
Height Limit	320 ft.	350 ft.	320 ft.
Maximum Diagonal Maximum Length	200 ft. above 150 ft. 170 ft. above 150 ft.	Bulk dimensions based on site size; maximum ground level plan dimension is 275 ft.; maximum area of top floor is 8,100 sq. ft.; stepping of floors required between.	175 ft. above 150 ft. 124 ft. above 150 ft. Project steps in at uppermost floors. Top floor area about 22,000 sq. ft.
Incorporation of Art	Not required	Art equal to one percent of total construction cost.	None proposed.
Ground-floor retail	Not required	Retail establishments (excluding financial institutions) with not more than 2,000 sq. ft. exempt from FAR calculation. Maximum additional FAR for inclusion of retail would be 0.5:1.	6,500 sq. ft. proposed for retail and retail banking use to accommodate about three tenants on the ground floor
Recreation/Open space	Not required for commercial uses; required for dwellings	1 sq. ft. for public use per 25 sq. ft. of commercial floor area (about 7,700 sq. ft. at an FAR of 12:1).	None proposed.
Off-street loading	2 spaces for 200,001-500,000 sq. ft. of office; 0 spaces for retail use below 10,000 sq. ft. (City Planning Code Sec. 152, Table 5). Two spaces required for site.	0.1 spaces per 10,000 sq. ft. of office floor area for buildings containing more than 100,000 sq. ft., plus 1 space for retail use between 10,001 and 50,000 sq. ft. (three spaces for the site).	3 spaces provided, as recommended by the City Planning Commission Resolution No. 9284 and in GDD.
Long-term Parking	None required for commercial uses. Up to 7% of floor area allowed as accessory use.	None permitted for office uses	About 35 long-term parking spaces for commercial use.
Provision of a Transportation Broker	None required	Proposed Requirement	Transportation broker would be provided as a building management service.
Provision of Housing	None required; floor area bonuses may be used for on-site housing.	640 sq.ft. per 1,000 sq. ft. of office space, about 200 units for project; Maximum FAR equal to 5:1 on-site.	None provided on-site; sponsor providing Section 8 equity and contributing to City's Shared Appreciation Mortgage Bond Revenue Program.

SOURCE: City Planning Code; and Guiding Downtown Development, July 1982.

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FAR for the project site be changed from 14:1 to 12:1 and would allow an additional 5:1 FAR for housing development. GDD would allow the transfer of development rights from non-contiguous parcels within the C-3-0 or Special Conservation Districts with architecturally and/or historically significant buildings. It does not propose changes to the Planning Code allowance of transfer of development rights from contiguous parcels which do not contain architecturally or historically significant buildings.

The project would exceed the GDD base office recommended FAR of 12:1; the project FAR would be about 21.3:1 (14:1 base and about 7.3:1 of transferred area). Bulk dimensions recommended in GDD would be determined by each individual site's dimensions; the maximum plan dimension at ground-level would be 275 ft. and the maximum floor area of the top floor would be 8,100 sq. ft. GDD would require a stepping of floors between these upper and lower maximums. The proposed building design would not conform to this provision. Under the proposed guidelines contained in GDD, the allowable height would be raised from 320 ft. to 350 ft. At about 320 ft., the project would be 30 ft. shorter than the proposed height limit.

The project would include ground-floor retail space, encouraged by GDD. Public works of art, valued at one percent of construction costs, are recommended in GDD. Art work is not currently proposed at the ground level of the project. GDD policies suggest that one sq. ft. of public open space be provided for every 25 sq. ft. of gross building floor area. If this guideline were applied to the proposed structure the recommended amount of open space would be about 13,600 sq. ft., or about 85% of the site area. The project as proposed would not include public open space, with the exception of the pedestrian arcade along the California St. frontage.

NOTES - Land Use and Zoning

/1/ City Planning Commission Resolution No. 9286 and Exhibit A, "Off-Street Freight Loading and Service Vehicle Space Requirement and Guidelines," approved January 21, 1982.

B. URBAN DESIGN

DESIGN

The project would result in the demolition of a four-story office building and construction of a 23-story (320-ft. tall) office building with ground-floor retail space. The project

IV. Environmental Impact

would be similar in scale to existing high-rises fronting California St. (see Figures 15 and 16, pp. 49 and 50), replacing a moderate-sized building with a high-rise structure (see Figure 17, p. 51).

The project would include a two-story pedestrian arcade along California St. (see Figure 18, p. 52); the arcade would provide definition to the building base and is intended by the architect to enhance human scale at street level. Ground-floor retail uses and commercial display windows would provide visual interest for pedestrians. The four corners of the building would be anchored by distinct vertical elements rising to the roofline and containing "punched" windows (set in from the line of the exterior building wall) that would be set in the granite exterior. Three columns would be positioned in the central section of each facade. Recessed between the columns would be curved, bay-style windows. The top of the project would be sloped and consists of tinted glass and wrought iron embellishments.

The Urban Design Element of the San Francisco Comprehensive Plan contains policies and principles which may be used to evaluate the proposed project with respect to its urban design implications. The relationship between applicable urban design policies of the Comprehensive Plan and the proposed project are summarized in Table 3, pp. 53-55.

SHADOWS

The project, in replacing an existing mid-rise structure, would increase shadows cast on Kearny St. and on some roofs of nearby shorter buildings. The project would not shade any nearby public parks or plazas. Most of the project shadow patterns would coincide with those cast by existing structures in the area (the Bank of America Building, 550 California St., 550 Kearny St., 600 California St., and 650 California St.). All streets and sidewalks in the site vicinity are partially shaded by existing structures during the day at all seasons of the year.

During winter, spring and fall months the project shadow patterns would generally coincide with shadows cast by nearby buildings throughout the day. No new shadow would be cast on surrounding streets and sidewalks (see Appendix C, Figures C1 and C2, pp. 253-254).

During the summer months, in the morning hours, the project shadow would add no new shadows to those cast by existing buildings on the sidewalk area on the north side of



Hartford Building

PROJECT

Liu Chong Hing Bank

Cogswell College

FIGURE 15: Photomontage Looking East
on California St.
from Cogswell College

SOURCE: Johnson Burgee Architects;
Square One Film and Video



▲
465 California St.

▲
PROJECT

▲
405 Montgomery

FIGURE 16: Photomontage Looking West
on California St.
from Leidesdorff St.

SOURCE: Johnson Burgee Architects;
Square One Film and Video



Bank of America
(background)
PROJECT

Liu Chong
Hing Bank

Hartford
Building

FIGURE 17: Photomontage Looking South
on Kearny Street from Under
Portsmouth Square Bridge

SOURCE: Johnson Burgee Architects;
Square One Film and Video



PROJECT

SOURCE: Johnson Burgee Architects;
Square One Film and Video

FIGURE 18: Photomontage Across Bank of America Plaza

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT

APPLICABLE URBAN DESIGN POLICIES	RELATIONSHIP OF PROJECT TO POLICIES
Objective 1 <u>Policies for City Pattern</u>	
1. <u>Policy 1</u> : "Recognize and protect major views in the city, with particular attention to those of open space and water." (p. 10)	The project site fronts the California St. view corridor. The project would not obstruct existing long-range views now available to the public as it would be surrounded by nearby development of similar or greater height. From distant points, the project would not be a prominent feature on the skyline. No short-range pedestrian views would be blocked by the project tower.
2. <u>Policy 3</u> : "Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts." (p. 10)	The proposed project would be similar in height and bulk to existing high-rise buildings which dominate distant views of the downtown and, therefore, identify the downtown area. Together with adjacent high-rise structures, the project would define the northwestern edge of the Financial District.
Objective 2 <u>Policies for Conservation</u>	
3. <u>Policy 6</u> : "Respect the character of older development nearby in the design of new buildings." (p. 25)	The project would contrast architecturally with older development in the vicinity; however, it would repeat some design elements of nearby older buildings. The base of the building would be defined by a break in the window line at the third story and an arcade along California St., providing a sense of pedestrian scale. The facade would be traditional in form with a distinct base, central section and top.

*City and County of San Francisco, 1971, Comprehensive Plan, Urban Design Element (page references shown in parenthesis).

SOURCE: Environmental Science Associates, Inc.

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT (Continued)

Objective 3

Policies for Major New Development

- | | |
|---|---|
| <p>4. <u>Policy 1</u>: "Promote harmony in the visual relationships and transitions between newer and older buildings." (p. 36)</p> | <p>See Item 3, above. The bay windows set between the columns, and between the columns and the end bays, would be a traditional San Francisco design element. The roof would be sloped and feature statues and wrought iron embellishments to provide visual interest and offset the blockiness of newer nearby buildings. The streetfront and building entrance along the arcade would be modern in style, while the archways of the arcade would be more traditional.</p> |
| <p>5. <u>Policy 2</u>: "Avoid extreme contrasts in color, shape, and other characteristics which will cause new buildings to stand out in excess of their public importance." (p. 36)</p> | <p>See Items 3 and 4, above. The building facade would be granite and light in color. The project would contain no reflective glass or high intensity lighting and would not impose reflective or glaring light on other properties or nearby roadways.</p> |
| <p>6. <u>Policy 3</u>: "Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations." (p. 36)</p> | <p>The proposed building would be located at the intersection of California and Kearny Sts., at the northwest border of the Financial District and along a primary view corridor into that district. The project design would reflect the character of the district as a center for office development and be similar in height and bulk to surrounding buildings. The project design is intended to provide a visual contrast to the Bank of America Building across California St.</p> |
| <p>7. <u>Policy 5</u>: "Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development." (p. 36)</p> | <p>See Items 1 and 2, above. The project would not be a prominent feature on the city skyline. At 320 ft. tall, the proposed building would be less than half the height of the Bank of America Building (780 ft.) directly across California St. The project would be diagonally across from the Liu Chong Hing Bank, which is approximately the same height (325 ft.). Adjacent structures to the north and east, at 550 Kearny St. and 550 California St. would be about half the height of the project.</p> |

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN* AND THE PROPOSED PROJECT (Continued)

- | | |
|---|---|
| <p>8. <u>Policy 6</u>: "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction." (p. 37)</p> | <p>The project would be similar in bulk to other buildings in the vicinity. The bay windows separated by columns are intended to reduce the appearance of bulk, and the pedestrian arcade would add a sense of openness and establish a human scale. See Item 7, above.</p> |
|---|---|

Objective 4
Policies for Neighborhood Environment

- | | |
|---|---|
| <p>9. <u>Policy 13</u>: "Improve pedestrian areas by providing human scale and interest." (p. 57)</p> | <p>The project would feature a pedestrian arcade on California St. and ground-floor retail use to promote pedestrian interest. The building base is intended to provide street-level scale.</p> |
|---|---|

IV. Environmental Impact

California St. west of the site. Towards noontime, the project would add new shadows on Kearny St. (see Appendix C, Figure C3, p. 255). By late afternoon, the project shadow would not increase shading on any streets or sidewalks.

WIND/1/

The strongest and most frequent wind direction during most months is from the west. Southwest winds are typically the second most frequent and second strongest winds. Northwest winds have had the second highest average speed during some years. Average wind speeds are higher during the summer than during the winter, and higher in the afternoon than in the morning. Peak winds are distributed evenly throughout the day and are strongest during the winter.

Wind speeds at pedestrian level can be predicted by comparing recorded wind data with "wind speed ratios", which express pedestrian level wind speeds relative to the speed above the wakes of surrounding buildings (called the freestream wind speed).^{2/} For San Francisco, the commonly used definitions of pedestrian-level wind speed ranges are as follows (windspeed ratios are not actual wind speeds but ratios; a point having "very high" wind speed ratios could still experience light winds on a near-calm day, and a point found to have "low" wind speed ratios could experience significant winds on an extremely windy day):

<u>Wind Speed Ratio</u>	<u>Ratio of Pedestrian Level Wind Speed to Freestream Wind Speed</u>
Low	0.00 - 0.19
Moderately Low	0.20 - 0.29
Moderate	0.30 - 0.49
Moderately High	0.50 - 0.60
High	0.70 - 1.00
Very High	Greater than 1.00

Wind tunnel tests of localized wind speeds and directions at and near the project site were conducted using a scale model of the site and vicinity, and using wind tunnel adjustments known to properly model atmospheric boundary layers near the surface of the earth. The study included separate tests of west, southwest, and northwest winds under existing conditions, with the proposed project, and with an alternative building design.^{3/} Because west, southwest and northwest winds are the most common in San Francisco, they are the most representative for evaluation purposes.

IV. Environmental Impact

West Wind

The existing near-surface wind speed ratios near the project site are low (wind speed ratios of less than 0.19) at all measured locations except for a moderately low wind speed ratios (0.22) occurring on the north side of the intersection of Kearny and Pine Sts. Portsmouth and St. Mary's Squares and the plaza north of the Bank of America Headquarters Building experience low wind speed ratios. Winds west of Kearny St. on Pine and Bush Sts. are easterly due to a large recirculating wind flow that forms on the downwind (east) side of Nob Hill. The Bank of America creates a large turbulent wake, which extends several blocks downwind.

The project would result in little change in wind speed ratios near the site; the greatest impact would be an increase of approximately 20% in westerly wind speed ratios at the intersection of Kearny and California Sts. and on the plaza north of the Bank of America, but wind speed ratios at these locations would still be low.

Northwest Wind

The existing near-surface wind speed ratios are low and moderately low at all measured locations. Two vertical vortices form at the northeast and southwest corners of the 650 California St. Building, west of the site; these vertical vortices cause a rapid acceleration of wind along Kearny St. on the west side of the site, causing a change in wind speed ratios from 0.13 at the intersection of Kearny and Sacramento Sts. to 0.44 and 0.31 west of the site./4/ The vortices also cause easterly winds on California Sts. west of Kearny St., in the wake of the 650 California St. Building. Portsmouth and St. Mary's Squares and the plaza north of the Bank of America experience low and moderately low wind speed ratios. The Bank of America creates a large turbulent wake which extends several blocks downwind.

The presence of the project would create a number of changes in the wind environment of the site vicinity. The vertical vortices would be formed on the south and east sides of the proposed building and would create swirling winds on California St. (just south of the proposed building). However, the street level wind speed ratios would remain about the same as now occur, i.e., low and moderately low. Wind speed ratios would increase from low to moderately low along California St. (except for one point west of the Liu Chong Hing Bank building, where the ratio increases from the moderately low level to the moderate level), and at the intersection of California and Kearny Sts. Wind speed ratios

along Kearny St. just west of the proposed building would decrease due to a change in the vertical vortices formed off of the 650 California St. Building. This effect would lessen the rapid acceleration of wind experienced under existing conditions on Kearny St. Wind speed ratios on the plaza of the Bank of America would remain about the same as at present, but the direction of wind flows would become more steady. There would be no change in the wind patterns on Portsmouth and St. Mary's Square.

Southwest Wind

The existing near-surface wind speed ratios surrounding the project site are generally low and moderately low. Winds are channelled along California St.; wind speed ratios along this street are therefore moderate and moderately high (up to a ratio of 0.50 on the northwest side of the intersection of Kearny and California Sts.). A moderate wind speed ratio (0.48) also occurs near the northwest corner of the Bank of America, where wind blowing north on Kearny St. turns east onto California St. Low and moderately low wind speed ratios occur on Portsmouth and St. Mary's Square. Two vertical vortices form from the northeast and southwest corners of the 650 California St. Building.

The project would create a number of changes in the wind environment of the site vicinity. Wind speed ratios at the intersection of Kearny and Sacramento Sts. would more than double, from low (0.13) to moderate (0.31). Street-level wind speed ratios would decrease at the intersection of Kearny and California Sts., where winds would be diverted above the street. The vertical vortices now formed from the 650 California St. building would not be present since much of the wind would be directed over the project. There would be little change in winds at Portsmouth and St. Mary's Squares and on the plaza of the Bank of America.

NOTES - Urban Design

/1/ This section is based upon a study, entitled "Wind-Tunnel Studies of the 580 California Street Building", March 1982, prepared by Dr. Bruce White as a private subconsultant to Environmental Science Associates, Inc. A copy of this document is included in this report as Appendix D, p. 256. Dr. White is Associate Professor of Mechanical Engineering at University of California at Davis. His involvement with this project was independent of the university.

/2/ Meteorological instruments used for recording the available data on wind speeds and directions in San Francisco are placed so that they essentially measure freestream wind speeds.

/3/ The tests included (1) flow visualization tests, which placed a continuous stream of smoke at various locations to determine wind directions, and (2) hot-wire anemometer measurements of wind speed ratios and turbulent intensities at 20 surface locations on and near the project site.

/4/ A vertical vortex refers to the movement of wind in a circular motion within a small area, generally down the facade of a building.

C. EMPLOYMENT, HOUSING AND FISCAL FACTORS

Direct Project-Related Employment

A projected 1,345 permanent full-time jobs would be provided by the project. Although no tenants are secured at this time, prospective tenants are anticipated to be accounting firms, corporate executives, and financial related services. Because specific tenants are unknown at this time, the projected total number of employees was derived by assuming an average number of sq. ft. per employee, by general use (see Table 4). The net increase in employment at the site, after subtracting the 225 existing jobs that would relocate from the site, would be about 1,120.

TABLE 4: PROJECTED PERMANENT EMPLOYMENT AT THE PROJECT SITE

<u>Employment Type</u>	<u>Building Space (Gross Sq. Ft.)</u>	<u>Space per Employee (Sq. Ft.)</u>	<u>Projected Number of Employees*</u>
Office	329,500	250 ***	1,320
Retail	6,500 **	400 +	15
Building Maintenance	340,000	30,000 ++	10
TOTAL EMPLOYMENT			1,345
TOTAL EXISTING EMPLOYMENT			225
NET INCREASE ON SITE			1,120

* All numbers are rounded to the nearest five employees.

** The net leaseable retail space is used for estimating employment. The gross retail space of 10,500 sq. ft. includes lobby and circulation corridors on the ground floor.

*** San Francisco Department of City Planning, "Office/Housing Production Program - Interim Guidelines," January 1982.

+ California Office of Planning and Research, January 1978, Economic Practices Manual, pp. 35-37.

++ Highrise buildings generally employ one janitor per 30,000 gross sq. ft. (Roger Dillon, Secretary-Treasurer, Building Services Employees Union, Local 87, telephone communication, April 17, 1980).

SOURCE: Environmental Science Associates, Inc.

Indirect (Secondary) Employment

Secondary employment and income would result from permanent project employment; through the multiplier effect, each employed person would generate additional employment through demands for goods and services. Assuming that the new jobs accommodated by the project would be primarily in finance, insurance and real estate (the so-called FIRE sector), about 1,320 additional jobs in other sectors of the Bay Area economy would result from the growth of FIRE businesses. The total number of Bay Area jobs that would be supported by growth in downtown employment due to the project would be about 2,440 (the 1,120 project jobs plus the 1,320 jobs induced by the multiplier effect)./1/

The project would require about 795 person-years of construction labor throughout the two-year construction period. About 1,230 additional person-years of employment would be generated in the Bay Area as a result of the multiplier effect of project construction./1/

HOUSING

Citywide Housing Requirements

- The project could result in an increase in downtown employment of about 1,120 net new jobs, and 1,345 gross new jobs. The Office Housing Production Program formula for calculating housing demand caused by downtown office projects assumes that 40% of (net) new office workers would move to San Francisco and that there are 1.8 office workers per household./2/ Based on this formula, the project would result in 415 new San Francisco residents from office employment; required housing would be 230 housing units (based on 329,500 gross sq. ft. of office space, excluding the ground floor with retail and lobby areas). This formula represents the basis for the City Planning Commission's policy for requiring housing to offset demand created by office developments. Another formula, recognized by the City, projects that between 15% and 30% of the new employees would be expected to move to San Francisco./3/ Based on net new on-site office employment (not retail or janitorial), the project would generate 156 to 311 new San Francisco residents. On the assumption of 1.4 persons per household,/3/ the project would generate a demand for 111 to 222 housing units.

Housing Affordability

A substantiated analysis of housing affordability would require, first, determination of the number of households generated by the project preferring to live in San Francisco. This figure, in turn, would be related to new employment increase and residence location preference. As new office space would be primarily occupied by existing San Francisco businesses that would relocate, most new workers would be already employed in San Francisco.^{3/} Those project workers transferring from another place of employment within the City would not generate housing demand directly attributable to the project; thus projections of housing demand attributable to the project must subtract workers already employed in San Francisco.

New employment growth due to the project would occur as new jobs were created in older buildings that would be vacated by project employees. As tenants for the project are not known, it is impossible to predict which buildings would be vacated for the project (and which buildings would be then vacated to fill the former level of vacated space, and so on). Employee movements are dynamic; all employees new to the City attributable to the project would not be directly employed within the project. For the above reasons, it is not possible to precisely quantify new employees due to the project.

The projected regional distribution of project employees is contained in Appendix E, Table E-1, p. 275. Where an employee would live is the result of individual decision-making. Such decisions are a function of location preference and housing economics. Information concerning housing preferences would be obtainable through surveys of new office workers. Preference information is complex, involving many factors such as number of bedrooms, type of neighborhood, family composition, and commute distance to work.

Assuming that the number of new employees and their preferences for housing were known, the most critical variable affecting the housing affordability analysis would be a new household's ability to pay for housing. The salary of new workers alone is insufficient to determine housing affordability; the total income of all members of a new worker's household must be known. A variety of published sources give salaries for various occupational categories, but no comprehensive data regarding the distribution of household income among office workers (or any other group of workers) exists. Citywide household income estimates based on the 1980 Census will become available during 1983, but this data source will not reflect household income of downtown office workers.

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The ratio of housing expenses to income, according to the "Office Housing Production Program (OHPP) Interim Guidelines, January 1982, are 30% of household income for rental expenses and 38% of household income for home ownership expenses. The down payment for home ownership may be assumed to be between 10% and 20% of purchase cost; however, a household's ability to afford a down payment would depend on household assets and liabilities, and would vary widely for different households. Assumptions regarding mortgage interest rates must also be made. Considering the volatility of interest rates in recent years, an affordability analysis based on current market interest rates might not be relevant when the project is completed and occupied.

Quantification of project impacts on the housing market is not possible based on available published information. A study of the "Feasibility of Performing a Housing Affordability Analysis" by Questor Associates (June 15, 1982) concludes that household income of project employees, distribution of housing demand, and magnitude of new demand can only be accurately determined by surveying occupants of buildings comparable to an office project. The study states that without such detailed information, "it is not feasible to quantify with reasonable accuracy the housing affordability parameters associated with new office construction."/4/

Based on available data, an approximation of a housing affordability analysis appears in Appendix E, Table E-2, p.277. Data in the table rely on published sources of office worker incomes (not household income), and prices of housing (without regard to housing availability). Assumptions are made regarding ratio of housing expenses to income, mortgage interest rates and down payments. Analysis based on these data and assumptions indicates that most project employees would not be able to afford ownership housing in San Francisco, although a significant minority, depending on the number of workers per household, would be able to do so. Most project employees, except the lowest-paid clerical employees desiring to live alone, would be able to afford rental housing in San Francisco.

FISCAL

Revenues

The proposed project would generate about \$917,000 in total property (non-bond), payroll, sales, gross receipts and utility tax revenues to the City General Fund, which would

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represent a net increase of \$876,600 over revenues generated to the General Fund from the existing site.

Assessed Valuation and Property Taxes

Based on replacement costs, the project would have a fair market value of about \$50 million (in 1982 dollars). Based on the property's full assessed (or market) value, the project would generate a total of about \$500,000 in non-bond property tax revenues. From the \$1 (per hundred dollars of assessed value) non-bond property tax revenue, an estimated \$397,000 would accrue to the City's General Fund. This amount would be a net increase of about \$360,000 over existing (\$36,660) non-bond property tax revenues to the City. The project would also generate total non-bond property tax revenues of \$32,000 (\$29,000 net) to BART; \$70,000 (\$64,000 net) to the San Francisco Unified School District; and \$1,000 (\$900 net) to the Bay Area Air Quality Management District.

The building would also generate property tax revenues to be used to retire bond debts. The tax rate at which these revenues would be generated in 1985 would depend on the amount of principal and interest payments due in that year and the total assessed value of property in San Francisco. The rate in 1981-82 is \$0.19 per hundred dollars of assessed value. If that were still the rate in 1985, when the building would be occupied, bond payment revenues from the building would be about \$95,000, a net increase of about \$86,000 above existing 1981-82 bond retirement revenues of \$8,770.

Payroll/Gross Receipts Tax

On August 5, 1982, the State Supreme Court ruled (*City and County of San Francisco versus Farrow*) that increased payroll and gross receipts taxes adopted by the Board of Supervisors (Ordinances 113-80 and 119-80) but approved by less than two-thirds of the voters in San Francisco, are constitutional and not violative of California Constitution Article XIII A.

Tenants of the proposed building would pay either the payroll or gross receipts tax, whichever is greater.^{5/} Assuming that all tenants would pay a payroll tax, a 1982 average wage of about \$25,000 for downtown office workers^{6/} and the current approval payroll tax rate of 1.5%, payroll tax revenues from the project would be about \$429,000. The owners of the project would pay a 0.3% gross receipts tax on their rental income. The estimated total annual rental income for the project would be \$9.0 million (1981

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dollars). Gross receipts tax revenues therefore would be about \$27,000. Total payroll and gross receipt tax revenues would represent a net increase in payroll and gross receipt taxes generated by the site, as no local business taxes are currently generated by the existing site (see Table 5).

TABLE 5: DIRECT NET TAX REVENUES GENERATED TO THE GENERAL FUND FROM THE PROPOSED PROJECT

Tax Category	Tax Rates (1981-82)	REVENUES		
		Existing Site	Proposed Project	Net Increase
Property (non-bond)	1% of full market value	\$37,000	\$397,000	\$360,000
Payroll*	1.15% of gross payroll expenditures	exempt	429,000	429,000
Gross Receipts Tax	0.3% of total rental income	exempt	27,000	27,000
Sales***	0.125% of gross retail receipts	3,400	30,000	34,000
Utility*	0.5-0.55% of gross expenditures	exempt	34,000	30,000
TOTAL		\$40,400	\$917,000	\$876,600

*See Notes 5-9 on p. 71 for sources and assumptions used to derive payroll, gross receipts, sales and utility tax revenues.

**On-site retail sales and for employee expenditures and employee expenditures are included in the sales tax category.

SOURCE: Environmental Science Associates, Inc.

The 1.5% payroll tax and 0.3% gross receipts tax are the rates that were approved by Board of Supervisor's Ordinance 118-80 and 119-80. These rates could be increased in the future if the Board of Supervisors enacted new ordinances increasing payroll and gross receipt tax rates./7/

Sales Tax

Sales tax revenues would be generated by both employee expenditures and sales from retail uses on the site. Based on a rate of 1.25% of gross retail sales, estimated sales tax revenues accruing to the City from employee expenditures for retail goods and on-site retail sales after project completion would be \$30,000, a net increase of about \$26,600 over existing sales tax revenues generated from employee expenditures (see Table 5)./8/

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Utility Taxes

General Fund revenues are generated to the City by utility taxes on water, gas, electricity and telephone. The existing site is exempt from this tax. Based on estimates of utility use, the project would generate about \$30,000 annually from utility taxes (see Table 5)./9/

Total Revenues

General Fund revenues for the City and County of San Francisco from the project would total about \$913,000, based on the tax rates and fees in effect in late 1982. General Fund revenues from the existing uses on the site totalled about \$40,000 in 1981; the project would result in about a \$873,000 net increase in General Fund revenues (see Table 5). Estimated total and net revenues accruing to the General Fund from the project site are based on 1982 tax rates and business conditions. Total revenues could change if: property tax distribution to the City and County changes in future years; payroll taxes fluctuate due to employee salaries; office and retail rents fluctuate, thereby affecting gross receipts tax, and, if costs for utilities change, particularly telephone costs, which are the largest component of the total utility users tax.

Costs

Muni

The estimated 1980-81 (most recent Muni estimate) net marginal cost (or increase in the deficit for Muni operations) per peak-hour ride is \$0.39./10/ The project would generate about 183,000 rides per year which could generate a cost deficit to the Muni of \$71,000;/11/ the deficit attributable to the existing project site is about \$12,000. After subtracting this amount (existing deficit), the project would result in a net deficit for Muni operations of about \$59,000 per year. The project would help pay for this deficit through its net revenue contributions to the General Fund and, indirectly, through sales tax contributions. (The Net Muni deficit should be compared to the net, not total, revenue contribution or of the project to the General Fund because the net amount represents the actual or residual revenues that will be available to offset project costs to Muni.) In the 1981-82 budget, 7% of Muni's revenues were appropriated from the General Fund. If this percentage were to remain constant, the project would generate about \$62,000 in General Fund revenues to Muni in 1985, which represents about 10% of the

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project's total net revenue contribution to the General Fund. Based on the marginal cost figures provided by Muni, the project would more than offset the Muni deficit generated by the project through its revenue contribution to the General Fund./11/ This conclusion should be qualified because the Muni deficit-per-mile figure is based on 1980-81 data, the marginal cost is based on all rides and not peak-period riders, and the total project-related deficit is calculated using only those workers who would use Muni as their primary mode of transportation while excluding those workers who would use a combination of transportation modes, such as Muni and Southern Pacific.

Under Assembly Bill (AB) 1107, Muni is eligible to receive a portion of the revenues from the BART \$.005 sales tax, provided that one-third of its operating revenues are collected from the fare box. Effective April 1, 1982, the Muni per ride fare was increased from \$0.50 to \$0.60, primarily to meet the fare box revenue requirement of AB 1107./12/ In the 1981-82 fiscal year, about \$3,000 in transit tax revenues would be generated from the site to be distributed by the Metropolitan Transit Commission (MTC) among Muni, BART and AC Transit.

The San Francisco Board of Supervisors, on April 27, 1981, approved an ordinance (224-81) to assess new downtown commercial development to support Muni. The plan called for levying a one-time fee of up to \$5.00 per gross square foot upon construction of new downtown office space. The ordinance, currently in litigation, would contribute funds for Muni transit services, including capital improvements and operating costs./7/ Assuming the one-time fee is upheld, the project could generate up to \$1.6 million in one-time fee revenues to Muni.

On February 1, 1982 the Board of Supervisors approved by resolution a measure declaring its intent to form a Core Area Transit Maintenance District, determining that a portion of public transit is provided Downtown in lieu of public parking places, and to impose upon real property within the area an annual payment for transit maintenance based on gross floor area. The project site is within the proposed district and would be subject to the legal assessment provisions finally adopted.

- On July 12, 1982 the Board of Supervisors decided to postpone acting on the assessment district plan until January 1983. This transit assessment district may no longer be applicable since both the Mayor and Board of Supervisors have withdrawn the proposal and the Mayor may intend to substitute an increase in business taxes. The business tax

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increase would be in the form of a ballot measure presented to the voters; implementation would depend on voter approval (and withstanding potential legal challenges). According to a memorandum entitled "Muni's Plans to Accommodate Downtown Growth," issued by Dean Macris, Director of Planning, August 5, 1982, Muni expects to be able to meet projected cumulative demand due to downtown office development without new City taxes. According to the worst-case scenario in the memorandum, the San Francisco Municipal Railway Improvement Corporation, a non-profit corporation established in 1971 for the purpose of selling bonds for transit improvements, may have to raise about \$111 million through the sale of bonds over a 10-year period to finance Muni expansion.

BART

In the 1981-82 fiscal year, the estimated per-paid-passenger fare deficit for BART is \$1.10./13/ Based on about 94,500 rides per year, the estimated annual BART deficit attributable to the project would be \$104,000;/14/ the current BART deficit generated from the existing site is \$17,000, resulting in a net deficit of \$87,000 (\$104,000 - \$17,000). The project would generate a net total of \$41,000 (exclusive of bond repayment) in revenues to BART, including \$29,000 in net property tax revenues; and \$12,000 net revenues from the 0.5 cent BART sales tax. This amount does not include the portion of \$.005 sales tax revenue distributed among BART, Muni and AC Transit by MTC. After subtracting BART's revenues from sales and property taxes which would be generated from the project, the net fare deficit of BART would be about \$46,000.

Effective September 8, 1982, BART increased its base fare in order to increase fare-box revenues to fund the capital improvement plan. The estimated 1981-82 per-paid-passenger fare deficit will change as a result of the increase. The amount of the deficit will be determined in October 1982./13/

Costs and Net Revenues

Costs to San Francisco for providing municipal services to the proposed project are difficult to estimate. Most evidence indicates that overall costs per unit of service provided (per sq. ft. or per employee) to the new building would be lower than for the existing buildings (see Appendix E, Table E-3, p. 279). This reduction in per sq. ft. costs is primarily due to improvements in fire and security protection systems in new construction. Costs for water and sewer service would be paid through user charges.

In general, existing public facilities, equipment, and labor are adequate to serve the project. While costs for servicing the site would increase because of the larger floor space and employment, costs per unit of service would not increase, and may actually decline.

CUMULATIVE AND INDIRECT EFFECTS

Downtown Office Space

- The proposed project, together with other major downtown office buildings which are under formal review (4.2 million sq. ft.); have been approved (5.4 million); and are under construction (7.8 million) would add about 17.4 million sq. ft. of office space if all were to be built (see Appendix B, Tables B-2 and -3, pp. 247-250). Subtracting 1.3 million sq. ft. of existing space that would be demolished for new buildings, a net of 16.1 million sq. ft. would be added. If all 16.1 million sq. ft. of office space were to be completed by 1990, there could be a short-term cumulative impact of oversupply while the market adjusts itself to absorb the new space. During this period commercial rents would be expected to decline, especially in the core of the downtown area and vacancy rates would rise. The number of proposed new office developments could decline if there is not sufficient demand for office space presently planned or under construction, and for office space that will become available due to existing leases that will expire. The overall effect of this slowed growth rate in downtown office development would be to relieve pressure for replacement of older buildings with new ones, and for conversion and rehabilitation of existing low-intensity retail, warehouse and industrial use with office use, most notably in the South of Market area.

Housing

The relationship between downtown office growth and housing demand in San Francisco was documented in a report prepared by Recht, Hausrath and Associates, Economists, that appears as Appendix C, pp. 289-329, of the 101 Montgomery Street EIR, certified by City Planning Commission Resolution 8941, May 7, 1981. This report is available for public review at the Office of Environmental Review, 450 McAllister Street, fifth floor, and is hereby incorporated by reference into this EIR pursuant to Section 15149 of the California Environmental Quality Act (CEQA) guidelines. In summary, this document states that relatively high wages and employment opportunities are attracting people to San

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Francisco, but many people cannot afford the high housing costs in the City. The report estimated the residency patterns of new households that would be attributable to a new high-rise office building and discussed various employment growth assumptions and their housing market implications.

Based on the total net new gross office space in San Francisco found in Table B-3, p. 250, the project would comprise 329,500 gross sq. ft. of new office space as part of a cumulative total of about 16.1 million gross sq. ft. of net new office space which is now under construction, approved, or under formal review. The project would be about 2.0% of the total new office space.

If the assumptions used and explained in the 101 Montgomery Street EIR were applied to cumulative office development, i.e., 15 to 30 percent of the new employees generated by cumulative office development would be expected to move to San Francisco and the average household would be occupied by 1.4 downtown workers, between 6,900 and 13,800 new households attributable to new office space development would add to the housing demand in San Francisco. If the assumptions used in the formula prescribed by the Office Housing Production Program (OHPP) Interim Guidelines of January 1982 were used (i.e., 40% of the new employees attracted to the new jobs created would want to live in San Francisco and the average household would be occupied by 1.8 downtown workers), about 14,300 new households attributable to new office space development would add to the housing demand in San Francisco. These projections of new households are based on 16.1 million gross sq. ft. of net new office space, which includes all projects listed in Table B-2, p. 247. The employment and housing projections shown in Table E-1, p. 275, exclude employees in existing buildings to be demolished on the sites of proposed buildings.

This impact on the housing market would be mitigated to a certain extent because various office developers, including Gerald D. Hines Interests, have agreed to provide units, through City Planning Commission final approval resolutions, or have proposed units on-site./15/ Table E-1, p. 275, shows the projected effects of downtown office development on the San Francisco and regional housing markets.

Cumulative office development would increase the City's current high ratio of jobs to housing supply. Housing demand would increase in an already tight housing market. In market situations where demand outstrips supply, prices can be expected to increase.

Factors independent of office development and outside the control of the City, for example immigration, interest rates, State and Federal tax policies, and economic trends, also influence the housing market. Quantification of the effects of cumulative office development on San Francisco housing prices is not possible.

- The new demand could be accommodated through additions to the housing stock, increases in the number of office workers per household, and/or displacement of existing residents. Large additions to the San Francisco housing stock are not anticipated in the near future because the housing construction industry has declined due to high costs and interest rates. Census data indicates that the number of people per household has historically been declining. This demographic trend will probably not reverse itself in the next few years due to a variety of factors, including divorces and separations, departure of young adults from families, and the increasing proportion of elderly population. It has been suggested that gentrification -- the replacement of low-income households by more affluent ones -- would occur./16/

Fiscal Considerations

Net costs of providing services to cumulative downtown development are difficult to quantify. Appendix E, Table E-3, p. 279, discusses some of the various approaches that have been attempted to address the issue of net fiscal costs of downtown development.

According to some of the studies, downtown development could result in an initial fiscal benefit. Since revenues to the City would probably increase at a slower rate than costs, due to Proposition 13 limitations on property tax increases, there could be a time when cumulative costs of providing services to currently proposed and approved development would be higher than revenues provided. This would be the case only if no new revenue sources are found, the rate of new development declines, and proposed development is not resold at some future date.

NOTES - Employment, Housing and Fiscal Factors

/1/ Projections are based on the Bay Area Input-Output Model from Cooperative Extension Service, University of California, Berkeley, San Francisco Bay Area Input-Output Model 1967-1974, July 1978. A multiplier of 1.18 was used for FIRE and 1.55 for construction.

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/2/ Dean Macris, Planning Director, Department of City Planning, July 20, 1981, Memorandum. The housing formula is as follows:

$$\frac{\text{Gross square feet of office space}}{250 \text{ sq. ft. per employee}} \times \frac{0.40}{1.8} = \text{number of required units}$$

/3/ The formula emerged from a study undertaken by Recht Hausrath and Associates for the 101 Montgomery Street EIR, pp.289-329. The text and the analytic methods used in the study can be found in Appendix C of the 101 Montgomery Street Final EIR, EE 80.26, certified by the San Francisco Planning Commission May 7, 1981. The formula is as follows:

$$\frac{\text{Gross sq. ft. of office space}}{250 \text{ sq. ft. per employee}} \times \frac{0.15}{1.4} \text{ to } \frac{0.30}{1.4} = \text{units of housing}$$

/4/ Questor Associates, Feasibility of Performing a Housing Affordability Analysis, June 15, 1982.

This study is on file and available for public review at the office of Environmental Review, 450 McAllister, 5th Floor.

/5/ Tax Collector's Office, Payroll Expense Tax and Business Tax Ordinances.

/6/ Bank of Canton Final EIR, EE 80.296, certified July 15, 1982.

/7/ Buck Delventhal, City Attorney, telephone communication, September 7, 1982 and Diane Barry, City Attorney, telephone communication, September 20, 1982.

/8/ Sales tax revenues were estimated as follows: 1) 1,308 employees x \$1,200 average expenditures per downtown workers x 0.0125 (sales tax rate) = \$19,620; 2) 6,700 sq. ft. of retail space x \$120 gross sales/sq. ft./year x 0.0125 = 10,050; 3) \$19,620 + 10,050 = \$29,670 total sale revenues.

/9/ Utility user's tax revenues were calculated as follows, using 1982 utility rates:

water:	1.2 million cubic ft. per year x \$0.00414 per cubic ft. x 5 % tax = \$250.
gas:	8,260 therms per year x \$0.49 per therm x 5 % tax = \$200 per year.
electricity:	3.4 million KWH per year x \$0.0707 per KWH x 5 % tax = \$12,000 per year.
telephone:	306,950 net sq. ft. x \$1.40 per sq. ft. x 5.5 % tax = \$21,500.
TOTAL	\$33,950 (rounded to the nearest \$100).

/10/ Bruce Bernhard, Chief Accountant, San Francisco Municipal Railway telephone communication, August 20, 1982. The 1980-81 per-paid-passenger deficit will be revised in the 1982-83 fiscal year.

/11/ 1,346 employees x 29% ride Muni x 468 rides per year x \$0.39 deficit = \$71,245. The 29% transportation modal split is taken from the Department of City Planning, October 1980, "Guidelines for Environmental Evaluation - Transportation Impacts." The 468 rides per year assumes 260 work days per year, two rides per day, and absenteeism of 10% (vacation, holidays and sick days). Bruce Bernhard, Muni Chief Accountant, telephone communication, August 10, 1982. The average \$0.39 deficit per mile is based on 1980-81 Muni budget figures of an additional cost per ride (marginal cost) of \$0.71 and an average fare revenue per trip of \$0.32. Muni is unable to provide more recent data on cost and revenue figures per passenger. The deficit due to the project equals 1,070 employees x 29 % who ride Muni x 468 rides per year x \$0.39 deficit per rider which equals \$56,636.

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/12/ Bruce Bernhard, Chief Accountant, San Francisco Municipal Railway, telephone communication April 23, 1982.

/13/ Ward Belding, Senior Economic Analyst, BART, telephone communication, August 20, 1982.

/14/ $1,346 \text{ employees} \times 15\% \text{ ride BART} \times 468 \text{ rides/year} \times \$1.10 = \$103,938.$

/15/ The San Francisco Office Housing Production Program, August 19, 1982.

/16/ Report of the Citizen's Housing Task Force, San Francisco, July 29, 1982 and Berkeley Planning Associates, Displacement in San Francisco, September 2, 1980.

D. TRANSPORTATION

CONSTRUCTION TRAFFIC

Access to the construction site would be from Kearny and Spring Sts. Sidewalks on California, Kearny and Spring Sts. would be closed during the construction period for 14 to 18 months; covered walkways would be provided for pedestrians in the curb lanes of California and Kearny Sts. On Kearny St., construction may require the use of one-half of one through lane, as well as the curb lane. Right-turns from California St. (westbound) onto Kearny St. (northbound) number about 80 per hour during the p.m. peak hour and the proposed use of the Kearny St. and California St. curb lanes would not seriously affect conditions for existing traffic. Through movements on the northbound approach of Kearny St. across California St. are concentrated in the middle lane of Kearny St. because of the large number of right turns onto California St.; right turns are allowed from both the curb lane and the adjacent through lane of the Kearny St. approach. The westbound curb lane on California St. is a tow-away zone from 4 p.m. to 6 p.m.

The Muni cable car renovation project is scheduled to begin in October of 1982 and will require about two years for completion. On California St., between Kearny and Montgomery Sts., a 22-foot wide trench across both lanes occupied by cable car tracks will be excavated to a depth of about 15 ft. Underlying sewage and water mains will be replaced and the entire street will be resurfaced from curb to curb. On the project block, the cable car rehabilitation work will require about three months. Scheduling will be determined by the contractor, to be chosen in November. The cable car renovation plans provide for leaving one traffic lane open in each direction on California St., along either side of the trench. The use of all, or even a portion of, the curb lane for a temporary

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sidewalk during project construction may, therefore, not be an allowable use of the remaining street width. The Department of Public Works would rule on sidewalk closure and permitted uses of the curb lane for a temporary sidewalk. Further, the intersections of California St. with Kearny and Montgomery Sts. would be partially closed during some portion of the Cable Car renovation work period./1/

Figure 9, p. 21, shows the location of projects under construction, approved and proposed in the project vicinity. The 550 Kearny addition is under construction next to the project. Cumulative impacts from the project and other buildings under construction would be from overlapping sidewalk closures and from materials delivery truck traffic. As construction schedules would differ, the heavier truck demand from construction for the project would not overlap with the excavation truck traffic for the 550 Kearny addition.

PROJECTED TRAVEL DEMAND

The proposed project would generate approximately 960 person trips during the p.m. peak hour (about 920 office and 40 retail). Because the existing office building on the site generates an estimated 200 peak-hour person trips, the number of new net peak-hour trips to and from the project site would be about 760./2/ This new peak-hour travel generated by the project would result in an associated demand for about 240 trips by auto, 190 on Muni and 130 on BART. The remaining demand for 200 trips would principally be for travel on other public transit and other modes (walking, bicycles, etc.). (See Table 6, p. 74.)/3/

A total of 17.4 million gross sq. ft. of new office space is proposed, approved or under construction in the City. Tables B-2 and B-3, in Appendix B, show the projects included in the cumulative analysis. Approximately 1.3 million gross sq. ft. of existing office space would be replaced by the proposed development, resulting in about 16.1 million gross sq. ft. of net new office space. This growth, and the 0.5 million gross sq. ft. of net new retail construction, would generate approximately 48,000 person trip ends during the weekday p.m. peak hour.

Hotel projects have not been included in the cumulative analyses because hotel uses have different peaking characteristics from office buildings and generally do not significantly affect peak-hour traffic or transit. Residential projects have not been included because

residential travel in the downtown is generally in the opposite direction to commute traffic during peak-hours. The office trip generation rate and modal split distribution are predicated on the assumption that housing would be available in the City. Inclusion of residential projects, therefore, would result in double counting of project generated travel.

Peak-hour travel by mode for the project and cumulative developments is shown in Table 6. The modal assignments have been made assuming existing travel patterns and do not attempt to predict any modal shift (see Appendix F, p. 280, for further discussion). As the bridge and freeway system serving the City is currently near capacity during peak hours, the present population of persons traveling by single-occupant automobiles might be expected to change in the future. Much of the City-wide peak-hour increase might be expected to be accommodated by a shift from single-occupant automobile to ridesharing or public transit.

TABLE 6: PROJECTED PEAK-HOUR PERSON-TRIPS BY TRAVEL MODE*

Modal Type	Projects Under Construction**	Approved Projects**	Projects Under Formal Review**	580 Calif. Project	Total
Automobile	6,980	4,600	3,410	240	15,230
Muni	5,480	3,620	2,710	190	12,000
BART	3,700	2,440	1,820	130	8,090
AC Transit	1,720	1,120	820	60	3,720
SamTrans	250	170	120	10	550
SPRR	940	620	460	30	2,050
GGT	820	540	400	30	1,790
Ferry	180	110	80	10	380
Other	<u>1,480</u>	<u>1,220</u>	<u>1,430</u>	<u>60</u>	<u>4,190</u>
	21,550	14,440	11,250	760 ***	48,000

* Projections based upon distribution shown in Table F-1, Appendix F, p. 281.

** Individual projects are listed in Table B-2, Appendix B, p. 247. The 580 California St. project has been separated here from the projects under formal review totals shown in Table B-3.

*** Less trips by existing on-site employees

In this and other San Francisco EIRs, a land-use type of approach has been used to estimate employment and the resultant transportation impacts of both the proposed

project and cumulative development. An alternative type of approach is to forecast travel demand based upon regional projections of future employment (employment trend approach)./4/ Appendix F, pp.287-290, contains a discussion of the differences between the two approaches.

TRANSIT

The transit analysis (conducted using Department of City Planning Guidelines) analyzed cumulative and project ridership based on existing capacity. As a "worst case", this analysis assumes no expansion in the transit system and the results are not dependent on increased City, State or Federal funding. If existing City, State or Federal funding were to decrease, operating conditions on the Muni and other carriers would be expected to deteriorate. Conversely, if City, State, and Federal funding were to increase over existing levels, operating conditions would be expected to improve. The estimated ridership, for the 16.1 million gross square feet of net new cumulative office development and the 0.5 million gross square feet of net new retail development, and for the project, and load factors based upon existing capacity are shown in Table 7. As all of the transit agencies have five-year plans for improving service, load factors based upon capacity proposed to occur in the current five-year plan cycle (1982-1987) for each transit agency are also shown in Table 7.

The existing loads plus the project trips and cumulative trips on the 37 Muni lines with stops within 2,000 feet of the site are expected to result in about 36,100 outbound p.m. peak hour trips./5/ The project would generate approximately 190 p.m. peak-hour Muni trips. Project-generated riders during the p.m. peak hour would be about 1.6% of the demand from the 16.1 million gross square feet of net new cumulative office development and the 0.5 million gross square feet of net new retail development (see Table 6, p. 74). Line by line Muni loading projections are shown in Table 7a, p. 77a.

The addition of the ridership from the projected 16.1 million gross square feet of net new cumulative office development and the 0.5 million gross square feet of net new cumulative retail development would cause demand on most of the affected Muni lines to exceed existing capacity. This would also be the case for BART transbay, Southern Pacific and SamTrans. As the cumulative demand increases, the length of time of peak loadings would increase, spreading peak-of-the-peak conditions over time. As some lines

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only operate during heavy demand periods (for example, express service for one to two hours during peak periods), there may not be additional capacity available to allow spreading over time without adding more runs. (Additional runs may not require increases in vehicle fleet size as the additional runs would be extending the peak period level of service over a longer period of time. Additional runs would cause increases in operating and maintenance costs as well as some addition to farebox revenues.)

Assuming that existing funding continues and proposed expansion occurs, the future load factors on the transit agencies would be as shown in Table 7. Muni is proposing to increase systemwide capacity by 19%. Assuming the increase to be provided uniformly, average loading including ridership from the cumulative demand would be over capacity. If Muni does not apply the increase uniformly but rather gives a greater increase in capacity on the lines serving the downtown and a lower increase in capacity on other lines, the load factors would be lower than those shown for Muni in Table 7. BART is projecting a peak hour capacity of 16,500 seats transbay (eastbound) and 11,000 seats westbay (westbound). Recommended maximum capacity would be 24,750 and 16,500 respectively. Average loadings, including ridership from the projected 16.1 million gross square feet of net new cumulative office development and the 0.5 million gross square feet of net new retail development, would not be over capacity with the anticipated five-year plan capacity.

- The project would be subject to the development fee imposed under Ordinance No. 224-81 (if that fee is sustained) and whatever other lawful measures which may be adopted by the Board of Supervisors for the purpose of generating funds to provide for mitigation of the incremental peak-hour transit congestion attributable to the project upon completion.

AC Transit does not have any increases proposed for its transbay service and would therefore be operating at 99% of its recommended maximum capacity with the cumulative demand. SamTrans is proposing to have a capacity of between 4,800 and 5,000 seats per hour on its San Francisco routes. Recommended maximum capacity would be 6,250 riders. Average future loadings on SamTrans would be under seated capacity when the anticipated capacity becomes available. Southern Pacific/CalTrans does not have any proposals to increase seated capacity, but station improvements, including additional parking, are proposed. Southern Pacific would therefore operate in excess of its recommended maximum capacity with the cumulative demand. Golden Gate Transit

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is proposing to increase peak period (6-10 a.m.) motor coach capacity by 25% over existing levels and to increase ferry service by addition of another Larkspur Ferry (an increase of about 70% over existing service). Average future loadings (including the cumulative demand) on Golden Gate Transit would not exceed capacity when the proposed additions become available./6/

● TABLE 7: AFTERNOON PEAK HOUR OUTBOUND TRANSIT RIDERSHIP

Agency	RIDERSHIP			LOAD FACTOR (Existing Capacity)*			LOAD FACTOR (Proposed Capacity)**	
	Existing (1982)+	Existing plus Cumulative w/o project	Existing plus Cumulative plus Project	Existing	Existing plus Cumulative w/o project	Existing plus Cumulative plus Project	Existing plus Cumulative w/o project	Existing plus Cumulative plus Project
Muni***	24,660	35,900	36,090	0.92	1.34	1.35	1.13	1.13
BART								
Transbay	13,600	18,840	18,920	0.90	1.25	1.25	0.76	0.76
Westbay	6,445	9,170	9,220	0.61	0.88	0.88	0.56	0.56
AC Transit	9,560	13,220	13,280	0.72	0.99	0.99	0.99	0.99
SamTrans	1,700	2,240	2,250	0.78	1.03	1.03	0.36	0.36
SPRR	5,180	7,200	7,230	0.78	1.09	1.10	1.09	1.10
Golden Gate								
Motor Coach	4,510	6,270	6,300	0.66	0.91	0.92	0.73	0.73
Ferry	800	1,170	1,180	0.39	0.56	0.57	0.33	0.33

*Load factor based upon existing (recommended) maximum capacity. A load factor of 1.00 is equivalent to 100% of recommended seated and standing capacity being used. Recommended maximum capacity is less than "crush" loadings that occur occasionally. The load factors shown for Muni are averages of projected load factors for all lines. See Table 7a, p. 77a for projected load factors for individual lines.

**Proposed capacity as specified by each agency's Five-Year Plan.

*** 1982 Muni ridership is approximate, based on a compilation of Muni ridership by Department of City Planning staff. Muni data are the average of the three most recent schedule checks (observations) made by Muni for each route between August 1981 and August 1982.

+Ridership Counts: BART, March 1982; AC Transit, composite of weekdays, May 24 and 27, June 3, 6 and 7, 1982; Golden Gate Transit, June 14, 1982; SamTrans, February 1982; Southern Pacific Caltrans, February 25, 1982.

SOURCE: Environmental Science Associates, Inc.

● TABLE 7a: EXISTING AND PROJECTED MUNI LOAD FACTORS*
(PM PEAK HOUR — PEAK DIRECTION)

Line	RIDERSHIP				LOAD FACTORS			
	Existing	Future w/o project	project	Future w/project	Existing	Future w/o project	Future w/project	project
1	1453.	1956.	11.	1967.	0.93	1.25	1.26	0.01
1X	640.	871.	5.	876.	1.11	1.51	1.52	0.01
2	474.	663.	4.	667.	1.10	1.54	1.54	0.01
3	520.	702.	4.	706.	1.08	1.46	1.47	0.01
4	467.	630.	4.	634.	1.08	1.46	1.47	0.01
5	981.	1498.	8.	1506.	0.94	1.44	1.44	0.01
6	544.	831.	4.	835.	0.84	1.28	1.29	0.01
7	407.	622.	3.	625.	0.77	1.18	1.18	0.01
8	657.	1004.	5.	1009.	0.74	1.13	1.14	0.01
9	468.	714.	4.	718.	0.89	1.35	1.36	0.01
11	184.	281.	1.	282.	0.64	0.97	0.98	0.01
12	451.	688.	4.	692.	0.85	1.30	1.31	0.01
14	1038.	1586.	8.	1594.	0.92	1.41	1.41	0.01
14GL	205.	312.	2.	314.	0.71	1.08	1.09	0.01
15	632.	924.	5.	929.	0.88	1.28	1.29	0.01
17X	162.	219.	1.	220.	0.64	0.87	0.87	0.01
21	643.	982.	5.	987.	0.85	1.30	1.31	0.01
30	1415.	1941.	11.	1952.	0.92	1.26	1.27	0.01
30X	435.	590.	3.	593.	0.86	1.17	1.18	0.01
31	657.	938.	5.	943.	1.07	1.53	1.54	0.01
31X	413.	562.	3.	565.	0.96	1.30	1.31	0.01
38&L	1963.	2738.	15.	2753.	1.01	1.41	1.42	0.01
38AX	453.	616.	4.	620.	1.26	1.71	1.72	0.01
38BX	272.	370.	2.	372.	0.96	1.31	1.32	0.01
41TC	119.	166.	1.	167.	0.41	0.58	0.58	0.01
42	393.	594.	3.	597.	0.99	1.50	1.51	0.01
45	561.	757.	4.	761.	0.90	1.21	1.22	0.01
66L	555.	741.	4.	745.	0.77	1.03	1.03	0.01
71	447.	683.	3.	686.	1.10	1.67	1.68	0.01
80X	416.	586.	3.	589.	0.83	1.16	1.17	0.01
J	909.	1389.	7.	1396.	0.84	1.28	1.28	0.01
KLMN	5725.	8744.	45.	8789.	0.96	1.46	1.47	0.01

*The load factor is the ratio of ridership to existing capacity, where capacity is calculated from the recommended maximum loading of the transit vehicles which is 150% of seated capacity except for the LRV fleet, which can carry 220% of seated capacity. As estimates of load factors, these should be regarded as approximate. Muni cordon points, where the ridership and capacity counts were made, do not necessarily correspond precisely to the point of maximum loading on each line. The future load factors have been calculated using existing capacity and do not include any capacity increases. Ridership is the average of the three most recent schedule checks for each route for the months of August 1981 to August 1982, as compiled by the Department of City Planning.

SOURCE: Department of City Planning; Environmental Science Associates, Inc.

PEDESTRIANS

The main entrance to the building, through which pedestrians would reach the lobby and elevators to upper-floor offices, would be located on California St. Ground-floor retail space would have separate entrances on California and Kearny Sts. (see Figures 7 and 8, pp. 15-16).

There would be about 900 pedestrian trips during both the p.m. and noon peak hours to and from the project. These trips would increase pedestrian traffic on the California St. sidewalk by 0.5 to 1.0 persons per minute, per foot of effective width. Added to existing pedestrian traffic (in 1982), the trips in and out of the project building would increase sidewalk traffic to as much as 15% of capacity during these peak hours. Pedestrians would remain unrestricted in their choice of walking speed, but would be required to maneuver to avoid conflicts with other pedestrians./7/ Table F-4, Appendix F, p. 287, shows flow rates and capacity used on sidewalks.

Upon project completion, the east crosswalk across California St. at Kearny St. would function at about 60% of capacity. On each cycle of the signal, pedestrian standing room in the northeast corner of the intersection (at the southwest corner of the project site) would typically fill to about one-quarter of capacity.

The subsurface parking garage proposed for the project would be entered from Spring St., increasing vehicular traffic across the California St. and Sacramento St. sidewalks by about 80 vehicles per day, or about 15 vehicles (about one every four minutes) during each of the peak-hours. Peak-hour pedestrian traffic on the California St. sidewalk crosses Spring St. at a rate of 10 to 15 persons per minute; there would be momentary delays for some pedestrians caused by vehicular traffic to and from the parking facility.

Spring St. is not used heavily by pedestrians. At present, about 100 to 150 persons use the narrow (four-ft.) sidewalks on Spring St. during the peak noon and p.m. hours. Vehicles accessing the loading docks and underground garage entrance to the project on Spring St. would cause momentary interruptions of sidewalk traffic on the west side of Spring St. There would be about eight service vehicles or trucks per hour during the day stopping at the loading docks. Blockage of the sidewalk by the cab of a docked truck would seldom occur, as the loading space would be recessed about 35 ft. from the sidewalk, accommodating large single-unit trucks as well as smaller service vehicles.

VEHICLES

Vehicular access to the proposed off-street loading spaces and the subsurface parking garage would be from Spring St. via California St. Spring St. is narrow (fourteen ft. curb-to-curb width) and one-way northbound to Sacramento St. Right turns from California St. onto Spring St. may be made from the curb lane which has a red zone (violators towed 7 a.m. to 6 p.m.) just east of Spring St. Left turns from California St. (eastbound) onto Spring St. may encounter momentary conflicts with oncoming (westbound) California St. traffic including cable cars.

On Sacramento St., traffic flow is one-way westbound; Muni's 1-California trolley line operates in the right lane. Therefore, outbound vehicles from Spring St. do not encounter transit vehicles when entering Sacramento St. Because Montgomery St. (one block east of Kearny St.) is one-way southbound, and Sacramento St. is one-way westbound, there are no left-turning movements from Montgomery St. onto Sacramento St. Drivers of outbound vehicles from Spring St. onto Sacramento St. are able to find gaps in the Sacramento St. traffic flows on each cycle of the signal at Montgomery St. and are not delayed in exiting from Spring St.

The project would add about 25 peak hour vehicle trips associated with the project garage or loading spaces on Spring St. that would exit on Sacramento St. and would enter from California St. During the p.m. peak hour there would also be vehicles stopping at curbside to pick up passengers from the building. Stopping on the north (project) side of California St. is prohibited during 4 p.m. to 6 p.m., and is actively discouraged by police; a Muni bus stop is located on the east (project) side of Kearny St. and stopping on the remainder of the Kearny St. (project) frontage is prohibited during 4 p.m. to 6 p.m. In all, fewer than 50 project-associated vehicles per hour (one per signal cycle) would be expected in any approach to any intersection in the area.

As a worst-case estimate, the project would not increase the ratio of traffic volumes to capacity by more than 10% on any street in the site vicinity. At the intersection of California and Kearny Sts., volumes in through-lanes would remain within the range of Level of Service C, or 70% to 80% of capacity. (See Appendix F, Table F-3, p. 283, for definitions of vehicular levels of service.) Operating conditions in the two right turn lanes of the northbound Kearny St. approach to California St. would worsen slightly from

existing levels due to conflicts with pedestrian traffic, increased by the project, in the east crosswalk. Right turns from California St. onto Kearny St. would similarly worsen due to conflicts with increased pedestrian traffic in the north crosswalk.

Cumulative vehicular and pedestrian traffic from 16.1 million gross sq. ft. of net new office development and the 0.5 million gross sq. ft. of net new retail development would degrade service levels at the intersections serving the freeway ramps closest the project as shown in Table 8. After cumulative development, assuming existing traffic patterns and existing modal share relationships remain constant, operations at the intersections of Clay and Front Sts. and Washington and Battery Sts. would not be reduced below Level of Service C by addition of the cumulative development or project traffic.

TABLE 8: LEVELS OF SERVICE AT FREEWAY RAMP INTERSECTIONS IN THE PROJECT VICINITY DURING PEAK-HOURS

	Clay/Front (pm)		Washington/Battery (am)	
	<u>LOS*</u>	<u>V/C**</u>	<u>LOS</u>	<u>V/C</u>
Existing (1982)+	A	0.51	B	0.62
Existing plus Cumulative development*** Without project	C	0.73	C	0.79
Existing plus Cumulative development With project	C	0.74	C	0.80

*LOS stands for Level of Service which is defined in Table F-3, Appendix F, p. 283.

**V/C stands for volume to capacity ratio, the use of which is explained in Appendix F, p. 280.

***The 16.1 million gross sq. ft. of net new cumulative development and the 0.5 million gross sq. ft. of net new retail development is listed in Table B-2, p. 247. The 580 California St. project has been separated from the projects under formal review totals shown in Table B-2.

+Intersection counts made Thursday, February 28, 1980 and Tuesday, July 21, 1981 by TJKM Transportation Consultant

PARKING

The project would provide space for long-term valet parking of about 35 automobiles in a subsurface level accessible by a one-way ramp from Spring St. Vehicle-pedestrian

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conflicts resulting from vehicles entering and leaving the subsurface parking level on Spring St. have been discussed under pedestrian impacts (see p. 78).

The project would create a demand for about 250 long-term spaces (more than 6 hours) and about 30 short-term spaces; overall there would be an on-site deficit of about 245 spaces (see Appendix F, p. 280, for more discussion). Commuters and visitors traveling to the proposed building by automobile would compete for spaces in public garages in the area. Within the near vicinity (about 1,000 ft.) of the project site are approximately 6,660 commercially available off-street parking spaces of which about 410 are located on sites of projects approved or under formal review and would eventually be lost. Average daytime occupancy in the unaffected spaces is approximately 97% with about 210 spaces open at any one time. Cumulative short-term parking demand from buildings proposed and under construction near the project (that would compete for the parking within 1,000 ft. of the project--walking distance for short-term parkers) is projected to be 140 spaces. The net cumulative short-term parking in the area within 1,000 ft. of the project would be able to meet the cumulative short-term demand.

Using the methodology described in Appendix F, p. 280, long-term parking demand for the 16.1 million gross sq. ft. of net new cumulative office development and the 0.5 million gross sq. ft. of net new retail development in the greater downtown area has been calculated to be about 15,600 spaces (including the project). The project would represent 1.6% of the total demand. As long-term parking demand is typically work (employee) related and is more likely to be influenced by cost rather than by location (see Appendix F, p. 280), long-term parking demand has been assumed to be distributed over the greater downtown and South of Market areas rather than being concentrated near the proposed project location. A recent survey by the Department of City Planning shows that there are about 37,000 off-street parking spaces in the C-3 district and an additional 6,500 spaces in the area bounded by The Embarcadero, Folsom, Eighth and Bryant Sts./8/ Based on average occupancy, about 4,100 spaces are available on a daily basis. The cumulative demand for the whole downtown area would create a theoretical net deficit of 11,500 spaces. Parking demand has been based upon existing travel patterns and is not dependent upon the availability of parking spaces or by the ability of the freeway and bridge system to carry the additional demand. Freeway and bridge capacity into downtown is essentially fixed at existing levels; major construction would be required to add new capacity assuming vehicle occupancy remains the same and such items as flextime do not become common.

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A net deficit of 11,500 spaces does not mean that 11,500 autos would be driving on City streets in search of parking. Rather, the travel demand represented by the parking deficit would most likely shift to ridesharing or transit. Increased ridesharing would not only reduce parking demand but would also reduce traffic impacts from the worst-case impacts shown in Table 8, p. 80. Increased transit use would add to the demands on the regional and local transit systems, particularly Muni.

The deficit may be less than this estimate as the survey did not inventory parking in the Civic Center area, the areas west of Eighth St., south of Bryant St. or north of Washington St. The survey did indicate that inside the study area about 6,000 parking spaces have been added since 1967 and approximately 1,400 are proposed to be added (exclusive of 4,845 parking spaces to be provided in Yerba Buena Center).

Current City policy, as stated in the Revisions to the Transportation Element of the Master Plan Regarding Parking, is to "Discourage the addition of new long-term parking spaces in and around downtown, limit the amount of new spaces to that which cannot reasonably be accommodated by transit and locate long-term parking facilities in areas peripheral to the downtown commercial district."9/

The Master Plan Parking Policy has also stated the need to "encourage short-term use of existing parking facilities within and adjacent to the downtown core by converting all-day commuter parking to short-term parking in areas of high demand or to car/van pool parking where short-term parking demands are low."9/ Accordingly, approximately 14,000 existing off-street spaces in the C-3-0 use district could be converted to short-term-only parking if the City enacted legislation to establish public control over private garages.

Imbalances in long-term parking demand and potential supply, given projected cumulative development and demand, would be expected to encourage the use of car pools and van pools, or the creation of satellite (intercept) parking facilities in outlying non-residential areas or in outlying cities, with shuttle or expanded Muni service to the downtown area, or increased use of transit directly for commuters from San Francisco or from suburban centers (East Bay, North Bay, Peninsula). Peninsula residents, for example, could find Southern Pacific commuter trains more attractive if they could get no closer to downtown by car than the train terminal at Fourth and Townsend Streets. All transit options would add to the demands on the regional and local transit systems, however, particularly Muni.

TRUCKS AND SERVICE VEHICLES

The project would generate an estimated average hourly demand for about 3.4 loading spaces and a peak demand of about 4.2 loading spaces./10/ Three 35-ft. by 12-ft. stalls would be provided in an enclosed loading area accessible at grade from Spring St. The provided space would satisfy the average demand for loading space. The stalls would be set on an angle to allow backing maneuvers by large trucks from Spring St., which is 14 ft. wide. As the loading dock would be recessed 35 ft. the largest single-unit trucks could be accommodated without blockage of the sidewalk. (Peak pedestrian traffic on Spring St. sidewalks is light, about one person per minute.) Stops by tractor-trailer combinations would be occasional, such as by moving vans. These would enter Spring St. with difficulty because of the narrow street width. If docked, the cab of the tractor would block Spring St.

The number of loading spaces proposed would conform to the requirements of Section 152 of the City Planning Code and would comply with the number and dimensions recommended in City Planning Commission Resolution No. 9286./11/ The loading dock dimensions would exceed the minimum requirements of Section 154 of the Code. The proposed loading and parking plan does not conform to Resolution No. 9286 in the following ways: the width of the curb cut for the loading dock would be about 35 ft., compared to a maximum allowable continuous curb cut of 24 ft.; the combined length of curb cuts on Spring St. for the loading dock and off-street parking ramp would be about 45 ft., compared to a maximum allowable of 36 ft. for a combination of curb cuts on any single street frontage; and, the distance between curb cuts would be about 7 ft., compared to a minimum allowable of 20 ft.

Some use of curbside loading space would be required during peak demand periods. The two metered yellow zone spaces now located along the Kearny St. frontage of the site would serve this purpose. There are also six metered spaces in a yellow loading zone on California St. east of Spring St., subject to towaway between 4 p.m. and 6 p.m.

NOTES - Transportation

/1/ Lynn Pio, Manager of the Municipal Railway Cable Car Renovation project, telephone communication, May 21, 1982.

/2/ Trip generation rates by floor area, for various uses, have been compiled by the Department of City Planning in Guidelines for Environmental Evaluation - Transportation Impacts," October 1980. Travel from office uses has been assumed to occur at the rate of

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17.5 total (57% work + 43% non-work) person trip ends (pte) per 1,000 net sq. ft. of office space. (A person trip end is a one way trip.) Travel from retail uses has been assumed to occur at 100 total pte/1,000 gross sq. ft. of retail space. Based on recent survey data, 45% of the retail travel has been assumed to be internal to the project site (i.e. already counted as part of the office travel). Retail trip generation is from Trip Generation, Insititute of Transportation Engineers (ITE), 1979. Rates have been adjusted from vehicle trip ends to person trip ends based upon an assumed vehicle occupancy of 1.4 persons per vehicle. The survey of retail travel was conducted by Environmental Science Associates at Embarcadero Center on Thursday, June 17, 1982 between 10:00 a.m. and 4:00 p.m. Twenty percent of daily office trips and 10% of daily retail trips are assumed to occur during the p.m. peak hour.

/3/ The regional distribution, office trip generation, trip purpose and peak hour percentage are from Attachment 1 of the Guidelines for Environmental Impact Review, Transportation Impacts Department of City Planning, October 1980, and the modal split assignment is from Attachment 2 supplemented by survey data collected by Environmental Science Associates, Inc.

/4/ The Department of City Planning, Office Environmental Review (OER), has issued a memorandum, dated July 2, 1982, dealing with the subject of the differences in the land-use and employment trend approaches, and recommending that both approaches be used in future EIRs to give a more balanced assessment of future peak transportation demand. This memorandum is on file with and available from the Office of Environmental Review, 450 McAllister St., 5th Floor. The memorandum calls out some of the fundamental differences between the two approaches and also details the limitations of each approach.

/5/ The 37 affected Muni lines are the 1, 1x, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 14GL, 14X, 15, 17X, 21, 30, 30X, 31, 31X, 38, 38L, 38AX, 38BX, 41, 42, 45, 66L, J, K, L, M, N, 71, and 80X.

/6/ Muni projections from Municipal Railway Rehabilitation and Replacement Plan. BART projections from Marty Birkenthal of BART on August 18, 1982; SamTrans projections from Gregory Kipp of SamTrans on August 18, 1982; A-C Transit proposals from Ted Reynolds of AC Transit on August 18, 1982; Golden Gate Transit proposals from Alan Zahradnik of Golden Gate Transit on August 19, 1982, Southern Pacific proposal from Jim Strong, Design Engineer with Southern Pacific, on August 26, 1982.

/7/ Capacity analysis based on Table 3.6 in Urban Space for Pedestrians, by Boris Pushkarev and Jeffery Zupan.

/8/ Inventory of Off-Street Parking Spaces, San Francisco Department of City Planning, May 24, 1982.

/9/ Revisions to the Transportation Element of the Master Plan Regarding Parking, Resolution 7647, San Francisco Planning Commission, January 20, 1977.

/10/ Wilbur Smith and Associates, Center City Circulation and Goods Movement Study, prepared for the San Francisco Transportation Policy Group, September 1980.

/11/ City Planning Commission Resolution 9286, Exhibit A, "Off-Street Freight Loading and Service Vehicle Space Requirement and Guidelines," adopted January 21, 1982.

E. AIR QUALITY

Upon completion, the project would affect air quality in two ways: emissions would be generated by project-related traffic and by combustion of natural gas for space and water heating. Transportation sources would account for over 95% of project-related emissions.

Carbon monoxide (CO) would be the pollutant most likely to be increased by the project. Cumulative and project effects on sidewalk CO levels at California St., Kearny, Washington and Clay Sts., were calculated for 1987 using peak-hour traffic volumes according to methods recommended by the Bay Area Air Quality Management District (BAAQMD); the results are shown on Table 9, p. 85.

TABLE 9: PROJECTED WORST-CASE LOCAL SIDEWALK CARBON MONOXIDE CONCENTRATIONS AT STREETS NEAR THE PROJECT*

<u>Street</u>	<u>Average Time</u>	Existing 1982 (ppm)**	1987 Base Without Project (ppm)**	1987 With Project (ppm)**
California St. (near Kearny St.)	1-hour	14.0	11.3	11.4
	8-hour	8.1	6.4	6.4
Kearny St. (near California St.)	1-hour	15.7	12.4	12.5
	8-hour	8.7	6.7	6.8
Washington St.	1-hour	17.8	16.5	16.6
	8-hour	8.8	7.3	7.3
Clay St.	1-hour	16.1	14.8	14.9
	8-hour	9.1	7.4	7.5
Background	1-hour	10.3	8.4	8.4
	8-hour	6.5	5.2	5.2

*Calculations were made for worst-case dispersion meteorology according to BAAQMD, Guidelines for Air Quality Impact Analysis of Projects, 1975, updated with 1981 Air Resources Board, EMFAC-6C motor vehicle emission rates. The existing background in 1982 was calculated as the three-year average of the second highest annual concentrations recorded at the BAAQMD monitoring station on Potrero Hill. The 1987 background was the 1982 value adjusted to 1987 according to the regional emissions projected by the 1982 Bay Area Air Quality Plan. The one-hour standard is 35 ppm; the eight-hour standard is 9 ppm.

** parts per million

SOURCE: Environmental Science Associates

IV. Environmental Impact

Project-generated traffic would contribute no more than 0.2 parts per million (ppm) to the eight-hour and one-hour CO concentrations in the project vicinity and would cause no violations of standards. Concentrations in 1987 would be less than in 1982 because, unless repealed, increased Federal and State mandated auto-emissions control measures during this period would more than offset the effects of increases in traffic volume.

Estimated daily project-related emissions of carbon monoxide, hydrocarbons, nitrogen oxides, sulfur oxides, and particulates are compared with 1987 projected regional emissions in Table 10, p.86. None of the project-related emissions would increase pollutant concentrations more than 0.02 percent over existing levels in the San Francisco Bay Area Air Basin.

TABLE 10: ESTIMATED DAILY PROJECT-GENERATED AND REGIONAL EMISSIONS
IN 1987 (tons/day)

	<u>Project-Related Vehicular Fuel Combustion*</u>	<u>Cumulative Development Vehicular Fuel Combustion</u>	<u>1987 Projected Regional Emissions***</u>
Carbon Monoxide	0.181	11.3	2,340
Hydrocarbons	0.016	1.0	515
Nitrogen Oxides	0.023	1.4	543
Sulfur Oxides	0.002	1.7	182
Particulates	0.027**	0.2	536

*BAAQMD, 1981, EMFAC-6C Vehicular Emission Factors. Emissions due to natural gas combustion would be negligible for all pollutants.

**Includes dust generated by vehicular traffic on paved roadways.

***Association of Bay Area Governments (ABAG), BAAQMD, MTC, 1982, 1982 Bay Area Air Quality Plan, p. 58.

SOURCE: Environmental Science Associates, Inc.

In summary, implementation of the project would add to local and regional accumulations of hydrocarbons, nitrogen oxides (two precursors of ozone), CO, particulates, and sulfur oxides. Project-related emissions would impede the attainment of standards for hydrocarbons, CO, and particulates; however, they would probably not have a measurable impact on citywide or regional concentrations, or the frequency of violations of the standards. The project would add to the cumulative increase in ozone downwind but would

not have a statistically significant effect on ozone concentration. Neither the project nor other development in the vicinity would conflict with the control strategies of the Bay Area Air Quality Plan.

F. ENERGY

Energy would be required for demolition of the existing structure, excavation and the removal of debris to a disposal site. An estimated 580 billion Btu at-source would be required during construction./1/ This is the equivalent of about 99,000 barrels of oil (bbl/oil) and includes energy required for fabrication and distribution of materials, as well as direct energy consumption. Direct energy consumption at the site would represent approximately 18% of total construction energy consumption. An estimated 100 billion Btu at-source (18,000 bbl/oil equivalent) would be consumed for site excavation, transportation of materials, and building construction, including on-site consumption of both gasoline and electricity.

Electricity and natural gas for project operation would be provided by PG&E. Electricity would be used for lighting, air conditioning, ventilation, elevator operation, office equipment operation, and plumbing system pumping. Natural gas would be used for space and water heating. Energy conservation measures are proposed. The project would not incorporate solar or other renewable energy sources.

The low-pressure air conditioning system proposed for the project would minimize the energy used to operate fan motors. An innovative scheme involving peripheral air distribution would reduce heat transmission through the building skin. Lighting would be by recessed, heat extract type fluorescent lamps with parabolic diffusers; these would save energy by lowering cooling demand by supplying and returning conditioned air in lieu of conventional air diffusers, as well by providing an efficient source of interior lighting./2/ Because the cooling load has been decreased through the use of heat extract type lamps, double paned windows become feasible as an energy saving feature./3/ Double-paned windows would be incorporated into the project to reduce energy transfer to the outside, reducing energy needed for heating and cooling (during times and in areas receiving direct solar insolation). Individual zone controls and multi-staged water chilling units would also be used to reduce energy consumption. An energy management control system would alert maintenance personnel whenever outside air is suitable for use in cooling the building.

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According to an estimate made using a State approved computer program, the project would have an estimated annual energy consumption of about 124,850 Btu per sq. ft. Thus, it would meet or exceed the prescriptive standards of Title 24 of the California Administrative Code which allow consumption of up to 126,000 Btu per sq. ft. annually. The estimated annual energy requirement per sq. ft. for the project is about 20% less than the per-sq-ft. consumption of the existing structure on the site. Annual project energy consumption is shown in Table 11.

The project would have a connected kilowatt load of about 3,400 kilowatts and would consume about 3.5 million kilowatt hours (KWH) of electricity per year./4/ The monthly electrical demand would range from about 265,000 KWH in February to about 326,000 KWH in August. The estimated average electrical demand for the project of about one KWH per sq. ft. per month would be about 70% of the average demand of 1.4 KWH per sq. ft. per month estimated for 16 other high-rise buildings recently proposed in San Francisco./5/ Peak electrical demand would be about 2750 KWH and would occur at about 5:00 p.m. on Mondays in August. This would coincide with PG&E's system-wide electrical consumption peak which occurs in late afternoons in August, but would not coincide with

TABLE 11: ESTIMATED ANNUAL PROJECT ENERGY CONSUMPTION

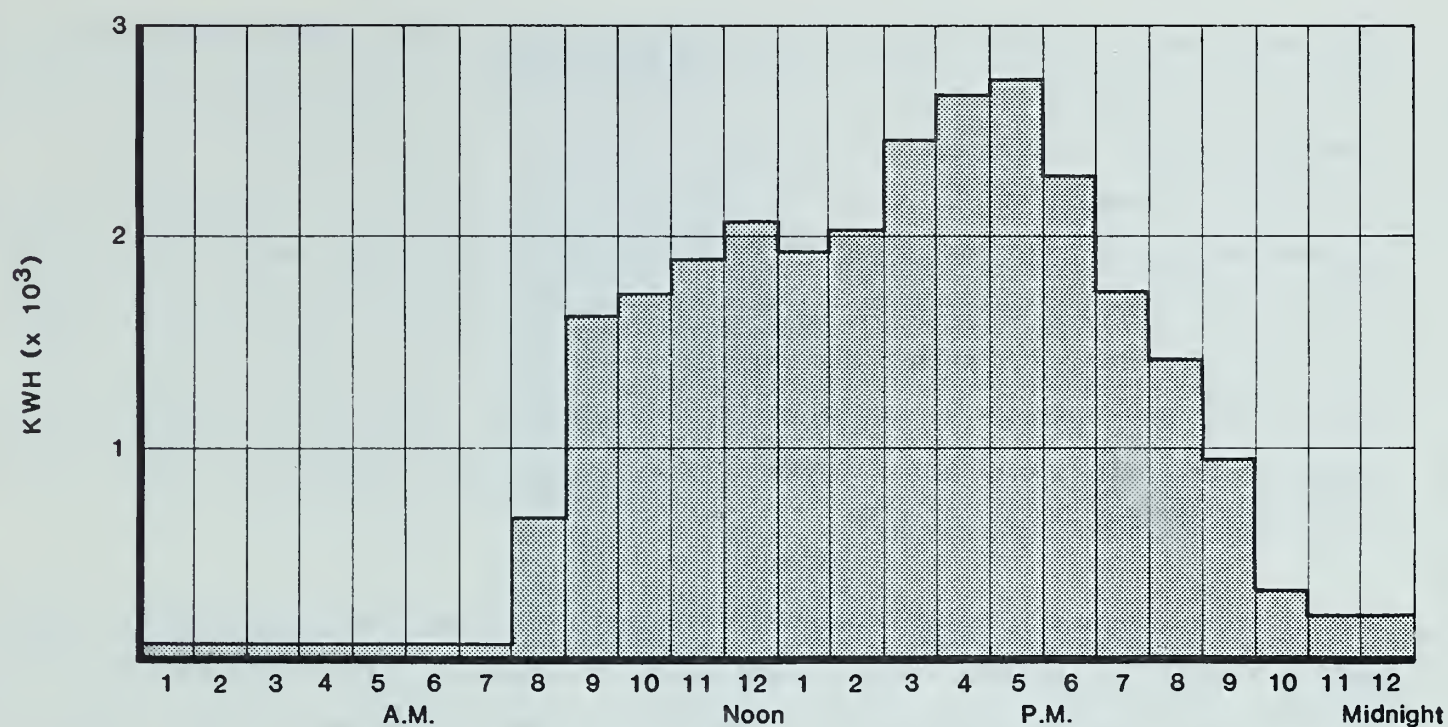
	<u>Units of Energy (in Thousands)</u>	<u>Btu At-Source (in billions)*</u>	<u>Barrel Oil Equiv. (bbl. oil)</u>
<u>Building Operation</u>			
Electricity	3,500 KWH	36.0	6,120
Natural Gas	826 cu. ft.	0.9	150
<u>Transportation**</u>			
Gasoline	120 gallons	26.0	4,420
TOTAL PROJECT	--	62.9	10,690

*1 KWH = 10,239 at-source Btu; 1 cu. ft. = 1,100 at-source Btu; 1 gallon = 140,000 at-source Btu; 1 bbl. oil = 5.88 million at-source Btu.

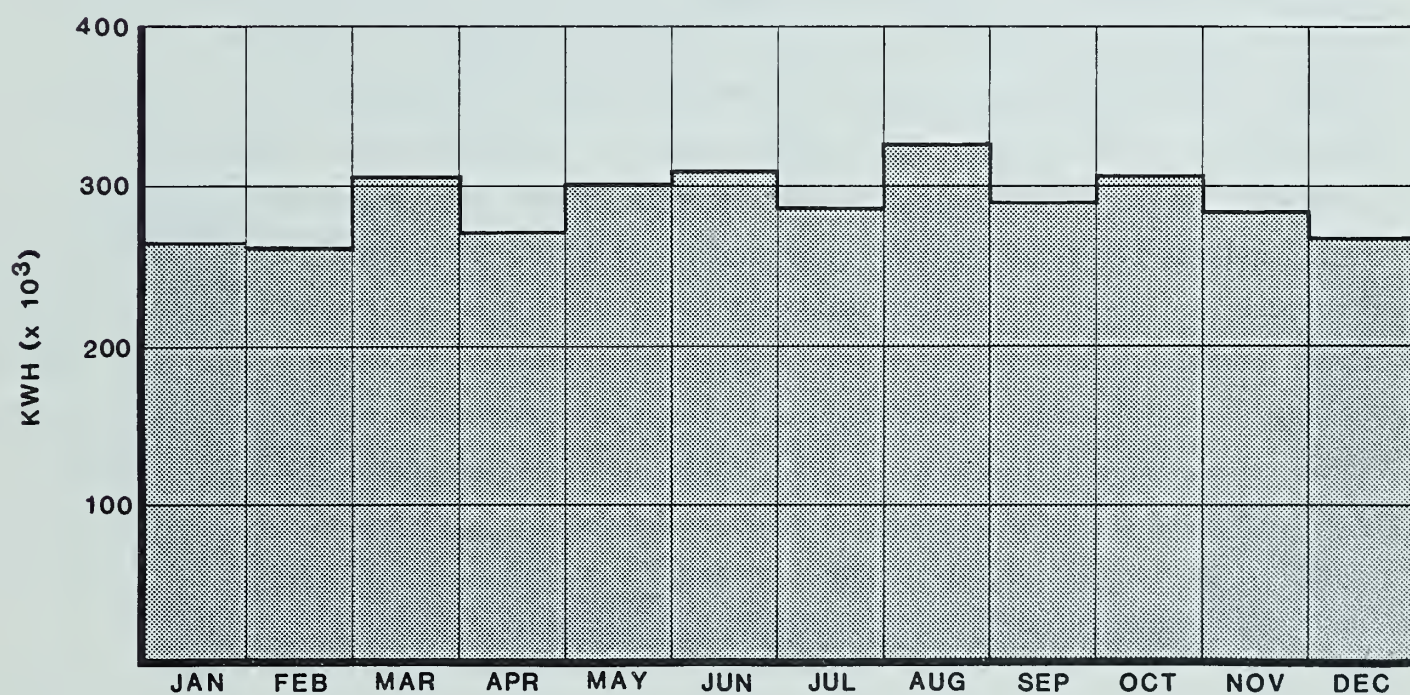
**for vehicle trips generated by the project

SOURCE: Environmental Science Associates and I.A. Naman + Associates

the San Francisco electrical consumption peak which occurs in December or January. Estimated peak daily and average annual electrical demand distribution curves are shown in Figure 19, p. 89.



Peak Day Demand of Electrical Consumption (August)



Average Monthly Electrical Consumption

FIGURE 19: Estimated Electrical Load Distribution Curves

SOURCE: I. A. Naman and Associates and Environmental Science Associates

IV. Environmental Impact

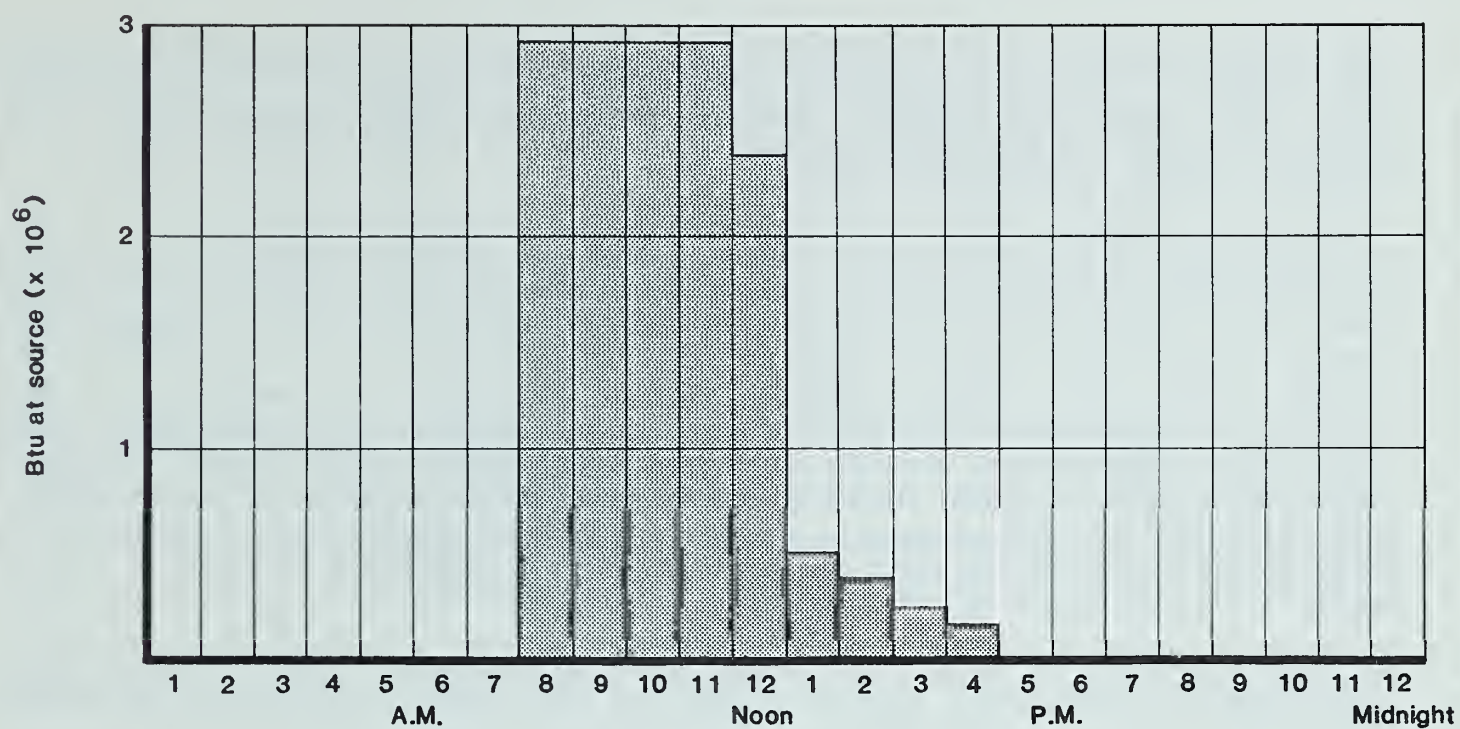
The project would consume about 826,000 cubic ft. (about 908 million Btu at-source) of natural gas annually, or about 75 million Btu per month. This represents an average consumption of about 0.23 cubic ft. per sq. ft. per month for the project, as compared to an estimated average of 2.9 cubic ft. per sq. ft. per month for 16 recently proposed high-rise buildings in San Francisco./5/ Peak demand for natural gas would be about 2,050 cubic ft. per hour, and would occur at between 7:00 and 11:00 a.m. on January mornings as hot water boilers begin heating the building. This would not coincide with the PG&E system-wide peak period for natural gas which occurs in the early evening hours in January. Estimated daily and average annual natural gas distribution curves for the project are given in Figure 20, p. 91.

Vehicle travel generated by the completed project would consume approximately 200,000 gallons of gasoline annually. This is equivalent to about 26 billion Btu per year. This projected use is based upon the mix of vehicles expected in California in 1985. In general, statewide vehicle fuel use is expected to decrease until 1985 as the vehicle fleet becomes more efficient and fuel more expensive.

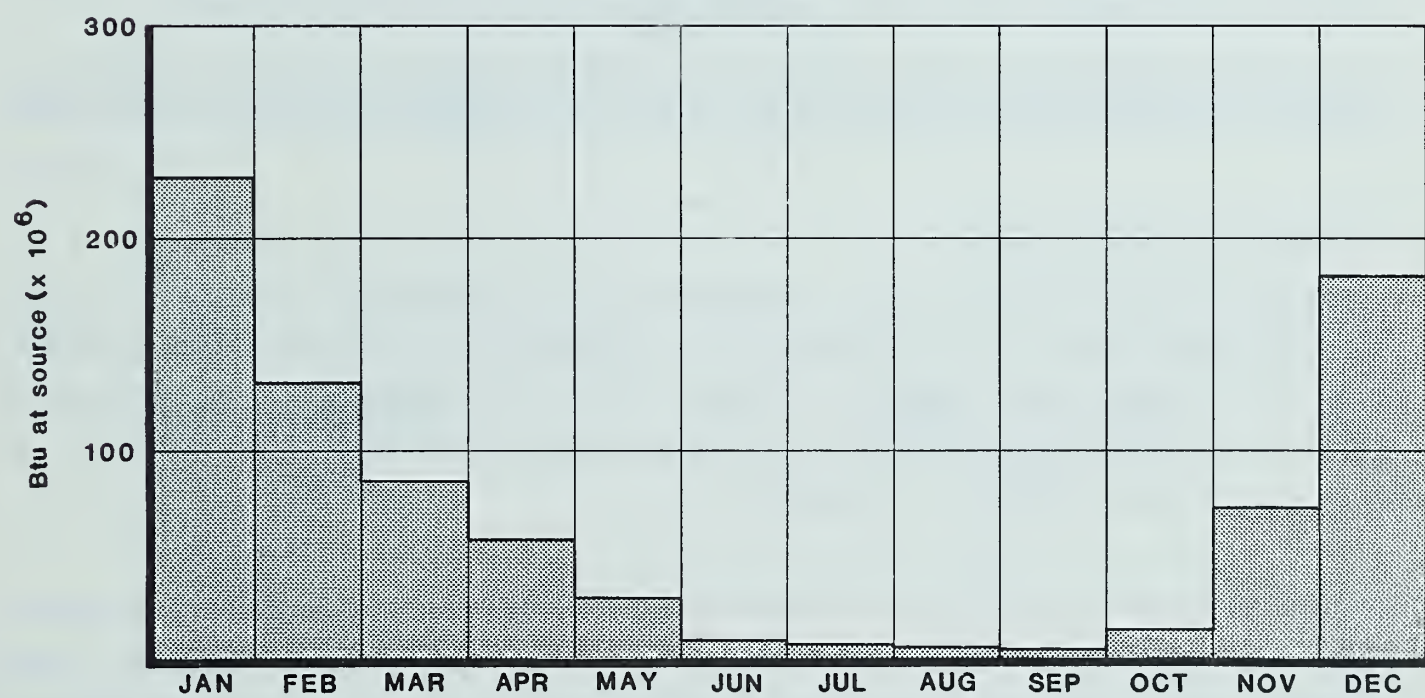
Cumulative increases in energy consumption in Downtown San Francisco by approved and recently proposed projects (16.1 million sq. ft.; see Appendix B, Table B-3, p. 250) would increase annual electrical consumption by more than 260 million KWH and natural gas consumption by more than 403 million cubic ft. Transportation associated with this cumulative office development would increase diesel fuel consumption by about 1.3 million gallons per year, gasoline consumption by about 8.8 million gallons per year, and electricity by about 52 million kilowatt-hours per year. Total increase in downtown energy demand would be about five trillion Btu annually, equivalent to about 880,000 barrels of oil per year. The electrical consumption represents about 0.4% of the annual PG&E system demand in 1981. In 1981, PG&E had a surplus peak generating capacity of 4,500 MW and in 1985 expects to have a surplus of 4,200 MW. The energy demand presented by cumulative development in San Francisco (peak demand of about 312 MW) could be accommodated by PG&E facilities now and in the future./6/

NOTES - Energy

/1/ Btu, British thermal unit, a standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (251.98 calories) at sea level. The term 'at-source' means that adjustments have been made in the calculation of the Btu energy equivalent to account for losses in energy which occur during generation and transmission of the various forms of energy.



Peak Day Demand of Natural Gas (January)



Average Monthly Natural Gas Consumption

FIGURE 20: Estimated Natural Gas Distribution Curves

SOURCE: I. A. Naman and Associates and Environmental Science Associates

/2/ Heat extract lamps allow rising warm room air to pass over lamps and draw the lamp heat directly up into the ceiling, thereby preventing this heat from entering the occupied space. This reduces the amount of cooling necessary and lessens the quantity of air circulated by the air distribution system. The reduction in air circulation reduces the amount of energy needed to drive the fans.

/3/ One of the major energy expenditures in high rise office structures is the cooling demand generated by waste heat from lights. In general the major energy concern in high rises is heat loss (cooling) and glazing areas act as important areas for heat loss to the outside. Double paned windows would normally not be feasible as it prevents heat loss through glazing. The proposed project plans to incorporate heat extract type light fixtures which eliminates the problem of waste heat from lights in occupied spaces. With the problem of excess heat virtually eliminated double paned windows become a feasible energy conservation measure. Double paned windows would eliminate the heat transfer of solar radiation into areas accessed by sunlight and thereby reduce cooling loads and would prevent heat loss during the night and thereby reduce heating loads during early morning hours.

/4/ Larry A. Fabian, I.A. Naman and Associates, project engineers, letter communication, April 6, 1982.

/5/ The following projects have been included in the comparative analysis of energy consumption (to determine an average): 101 Montgomery, 456 Montgomery, Howard & Main, 101 Mission, 595 Market, Spear/Main, 505 Sansome, Post/Kearny, 180 Montgomery, 135 Main, Golden Gateway, Pacific III, Pacific Gateway, Washington/Montgomery, Daon Building at 353 Sacramento St. and Bank of Canton. See Appendix D, Tables D-1, D-2 and D-3, for a list of projects and total area considered in the cumulative analysis.

/6/ Summary of Loads and Resources (Form R-1A), and Future Generating Facilities and Changes to Existing Facilities (Form R-6), Pacific Gas & Electric Company, April 1, 1982.

G. CONSTRUCTION NOISE

The noise environment of the project site is dominated by vehicular traffic, including trucks, automobiles, and emergency vehicles. The Environmental Protection Element of the Comprehensive Plan indicated a day-night average noise level (Ldn) of 75 dBA on Kearny and California Sts. in 1974./1,2,3/

Project construction would occur in several stages: demolition and clearance, excavation, foundation preparation, frame erection, and exterior and interior finishing. These activities would take a total of about 24 months. Throughout the construction period there would be truck traffic to and from the site, initially hauling away debris and dirt and then delivering building materials. Construction activities would temporarily increase noise levels in the project vicinity. Pile driving, a major source of construction noise during foundation preparation, would not be required for the project./4/

IV. Environmental Impact

All powered equipment used during construction, other than impact tools, must comply with the San Francisco Noise Ordinance (Section 2907b), which specifies a sound level of not more than 80 dBA at 100 ft. The Noise Ordinance prohibits construction work from 8 p.m. to 7 a.m. if noise from such work exceeds the ambient noise levels by 5 dBA at the property line, unless a special permit is authorized by the San Francisco Department of Public Works.

Typical construction noise levels anticipated for this project are shown in Table 12. Construction noise levels would be highest during the four weeks of building excavation and 24 weeks of exterior finishing. Noise levels in offices nearest the site in the 550 Kearny St. building and at 550 California St. could reach as high as 75 dBA and 78 dBA, respectively, assuming closed windows. Inside the Federal Home Loan Bank, construction noise levels could reach 64 dBA with the windows closed. All of these buildings have operable windows; if the windows were opened to provide ventilation, interior noise levels would generally increase by about 5 dBA. Noise levels of 70 to 75 dBA result in intermittent communication impairment, requiring raised voices at distances greater than two ft. and restricting telephone use.^{4,5/} Construction noise levels could reach as high as 62 dBA inside the Bank of America and Liu Chong Hing Bank buildings, which do not have operable windows. Ambient noise at this level would require raised voices to communicate at distances greater than six ft., and would be distracting to workers in these buildings.

TABLE 12: TYPICAL OFFICE BUILDING CONSTRUCTION NOISE LEVELS AT 50 FEET

<u>Construction Phase</u>	<u>Average Noise Level</u>
Ground Clearing	84 dBA
Excavation	89
Foundations	78
Erection	87
Finishing	89

SOURCE: D.N. May, Ph. D., 1978, Handbook of Noise Assessment, Van Nostrand Reinhold Environmental Engineering Series, p. 211.

NOTES - Construction Noise

/1/ Ldn, the day-night average noise level, is a noise measurement based on human reaction to cumulative noise exposure over a 24-hour period, taking into account the greater annoyance of nighttime noises. Noise between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.

IV. Environmental Impact

/2/ dBA is the measurement of sound in units of decibels (dB). The "A" denotes the A-weighted scale, which simulates the response of the human ear to various frequencies of sound.

/3/ Department of City Planning, Environmental Protection Element of the Comprehensive (Master) Plan, September 1974, page 17.

/4/ Dames and Moore, Preliminary Geotechnical Study, Proposed Office Building, San Francisco, California, January 1982.

/5/ National Institute for Occupational Safety and Health, Occupational Exposure to Noise, U.S. Department of Health, Educational and Welfare, 1972.

H. GROWTH INDUCEMENT

PROJECT-RELATED EFFECTS

The project would add about 329,500 gross sq. ft. of office space and 10,500 gross sq. ft. of retail and lobby space, and would remove an estimated 70,000 gross sq. ft. of office and 10,000 gross sq. ft. of parking use. The project would result in a net increase of 259,500 gross sq. ft. of office space and 10,500 gross sq. ft. of retail and lobby space at the site. The project would not displace any office uses at the site, as Fireman's Fund Insurance Company, the existing owner/occupant, is relocating its headquarters to Novato and branch operations to One Market Plaza; the cause of this relocation is independent of whether or not the proposed project were to be built./1/

Employment at the site would increase by about 1,120 jobs. Potential tenants are unknown, but could include tenants that relocate from other San Francisco locations, tenants that relocate from outside San Francisco, and new firms. If the building is fully leased, and the availability of its space does not create permanent vacancies in other San Francisco office buildings, total office employment in San Francisco would eventually increase directly by about 1,320 jobs due to the project.

Any net increase in downtown employment would increase the demand for retail goods and food services in the area. Existing retail could absorb demand not met by the project's retail space. This demand would be met by the proposed 6,700 sq. ft. of retail space on the project site and existing retail space in the project area.

- It is expected that many downtown workers would desire to live in San Francisco. Employment growth, however, would not correspond directly to increases in demand for

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housing and City services to residents, because some new jobs would be held by individuals who already live and work in the City, or who live in the City but who previously either did not work or worked outside the City, or by those who would live in surrounding communities. To the extent that the project increases the demand for housing in the City, new San Francisco residents would increase demand for commercial, social and municipal services. Increased demand for housing would have a general tendency to increase City residential rents and housing sales prices, although the influence on future housing costs cannot be quantified.

The project would be located in an already developed urban area, and would require no new construction, extension or expansion of public services or utilities. New commuters working in the project would create secondary demands on local and regional streets, freeways and transit systems (analyzed above in Transportation Impacts discussion).

CUMULATIVE EFFECTS

Development of the project would continue the trend toward replacement of older buildings in the financial district with new construction, but would not itself stimulate further office development near the project site, as such development has already taken place or is being planned.

Cumulatively, the project could contribute incrementally to a short-term oversupply of downtown office space in the mid and late 1980s. Such an oversupply could occur if demand for office space decreases, and if uncertain business conditions and high inflation rates continue. Increased amounts of available office space in the Financial District would relieve pressure for construction of new office and conversion of existing uses to office space in other areas of the City, particularly South of Market and the northern waterfront. An oversupply of office space in San Francisco, should it occur, would not appreciably inhibit office development elsewhere in the Bay Area, unless commercial rents in San Francisco decline to rates offered in outlying areas; current San Francisco office rents are about 35% higher than nearby cities (see Section III. C, p. 30).

The growth of office space would continue the trend of regional growth in service-sector and office headquarters activities and employment, the effects of which are diffused throughout the Bay region, and cannot be quantified for accurate analysis. The increase

IV. Environmental Impact

in downtown office space and employment would contribute to the continued growth of local and regional markets for goods, services and housing (see pp. 22-26 for a discussion of cumulative effects of downtown office growth).

NOTES - Growth Inducement

/1/ William Newberry, Manager, Real Estate Department, American Express Company, telephone communication, April 28, 1982.

V. MITIGATION MEASURES WHICH WOULD MINIMIZE THE POTENTIAL IMPACTS OF THE PROJECT

In the course of project planning and design, measures have been identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been or would be adopted by the project sponsor or project architects and contractors (mitigation measures included as part of the project and presented in the Initial Study are reproduced below), some may be implemented by public agencies, and the remainder are not included in the project. The City Planning Commission could require that some or all of these measures be included as conditions of project approval, if found to be warranted.

Each mitigation measure and its status is discussed below. Where a measure has not been included in the project, the reasons for this are discussed.

URBAN DESIGN

MEASURE PROPOSED AS PART OF THE PROJECT

The project would incorporate pedestrian amenities, including ground-floor retail use and a pedestrian arcade along California St., to improve access to work, to retail spaces and to transit facilities. The large retail windows at street level are intended to provide visual interest for pedestrians. The rough texture of the granite would contrast with the smooth-surfaced window areas and the sidewalk arcade would establish a human scale.

EMPLOYMENT, HOUSING AND FISCAL FACTORS

MEASURE PROPOSED AS PART OF THE PROJECT

- According to the formula contained in the Office Housing Production Program Guidelines (OHPP), January 11, 1982, the project would generate demand for 230 housing units in San Francisco. To partially satisfy this housing demand, the project

V. Mitigation Measures

sponsor has provided equity to a HUD Section 8 housing project, Serenity Towers, at 308 Eddy St. This housing development would result in construction of 73 units of low-income housing, for which the project sponsor has received 146 housing credits (Letter of June 7, 1982, from Dean Macris, Director of Planning; this letter is on file for public review with the Office of Environmental Review, 450 McAllister St., 5th Floor). The multiple credits for these units (two credits for one unit) are allowed under the "multiple credits mechanism" contained in the OHPP Guidelines to "promote and stimulate the production of affordable housing" in the face of "economic considerations" which "dictate that economic incentives be given" for this purpose (p. 9). The remaining housing requirement would be satisfied by development of additional housing at an off-site location or by other means, such as contributions to the City's Shared Appreciation Mortgage Revenue Bond Program.

TRANSPORTATION

MEASURES PROPOSED AS PART OF THE PROJECT

During the construction period, construction truck movement would be limited to minimize peak-hour traffic conflicts. The project sponsor and construction contractor would meet with the Traffic Engineering Division of the Bureau of Engineering to determine feasible traffic mitigation measures to reduce traffic congestion during construction.

To minimize cumulative traffic impacts due to lane closures and street excavation during construction, the project sponsor would coordinate with construction contractors for any concurrent nearby projects that are planned for construction, or later become known. The project sponsor would coordinate construction plans with the contractor selected for the Muni Cable Car Renovation Program to ensure adequate provision for pedestrian and vehicular travel on California St. and access to the project site for construction vehicles.

The proposed off-street loading plan would exceed the minimum requirements of Sections 152 and 154 of the City Planning Code. The project would provide three off-street loading spaces, which would conform in number and dimension to City Planning Commission Resolution No. 9286, dated January 21, 1982.

V. Mitigation Measures

Upon project completion the project sponsor would encourage tenant firms to implement a flexible time ("flex-time") system for employee working hours (flex-time is designed to reduce peaks of congestion in the transportation system).

To mitigate traffic congestion by the project, a transportation broker in the building management office would encourage transit use through the sale on-site of BART, Muni and Golden Gate Transit passes, and would coordinate employee car pool and van pool systems in cooperation with RIDES for Bay Area Commuters by providing a central clearinghouse for car pool and van pool information.

- Should Ordinance No. 224-81, which would require the sponsor to contribute funds for maintaining and augmenting transportation service in an amount proportionate to the demand created by the project, be declared invalid by the Courts, the project sponsor has agreed to participate in any subsequent equivalent mitigation measures adopted in lieu thereof, by the City, which will apply to all developments similarly situated.

Within a year of full occupancy of the project, the project sponsor would conduct a survey, in accordance with methodology approved by the Department of City Planning, to assess actual trip generation patterns of project occupants and actual pick-up and drop-off areas for car pools and van pools. The project sponsor would make this survey available to the Department. Alternatively, at the request of the Department, the sponsor would provide a fair and equitable in-lieu contribution toward an overall transportation survey for the downtown area to be conducted by the City.

The project sponsor would provide secure bicycle parking facilities to encourage the use of bicycles by employees and messengers. Handicapped parking and handicapped access facilities would be provided in the proposed parking garage.

Building directories and visual aids indicating the location of the freight elevators would be placed in the loading area of the building.

MEASURES THAT COULD BE IMPLEMENTED BY PUBLIC AGENCIES

Pacific Gas and Electric Company could coordinate work schedules with other utilities requiring trenching, so that street disruption would take place during weekends and off-peak hours. This should be done through the San Francisco

V. Mitigation Measures

Committee for Utility Liaison on Construction and Other Projects (CULCOP). In-street utilities should be installed at the same time as the street is opened for construction of the project to minimize street disruption.

The overload that would occur in Muni, BART, AC Transit and the SamTrans mainline route (Highway 101) due to cumulative development in the Downtown area could be mitigated by provision of additional buses, by headway changes, and possibly by shifts in routes. Implementation of this mitigation measure by the applicable transit carriers would depend primarily on the availability of funds and on actions initiated by MTC and the respective transit agencies and districts.

AIR QUALITY

MEASURES PROPOSED AS PART OF THE PROJECT

During excavation, unpaved demolition and construction areas would be wetted at least twice a day to hold down dust; this would reduce particulate emissions (dust) by about 50%. A solid fence would be provided, where feasible, around the construction site to further reduce dust.

The project contractor would maintain and operate construction equipment in such a way as to minimize exhaust emissions. During construction, trucks in loading or unloading queues would be kept with their engines off when not in use to reduce carbon monoxide emissions.

CONSTRUCTION NOISE

MEASURES PROPOSED AS PART OF THE PROJECT

The project contractor would muffle and shield intakes and exhaust, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible.

The general contractor would construct barriers around the site, and around stationary equipment such as compressors, which would reduce construction noise by as much as 5 dBA. The general contractor would locate stationary equipment in pit areas or excavated areas as these areas would serve as noise barriers.

The project sponsor would perform an analysis of noise reduction requirement for the project and include noise insulation features in the building design. Such design features would include fixed windows and climate control.

ENERGY

MEASURES PROPOSED AS PART OF THE PROJECT

A dual pane, tinted window system would be used to reduce energy transfer across the building envelope and to lower heating and air conditioning requirements.

Energy efficient fluorescent lights with parabolic diffusers would be used to conserve energy and reduce glare. These lights also supply and return conditioned air in lieu of conventional air diffusers. Whenever possible, office suites would be equipped with individualized light switches, time clock operation, and fluorescent lights to conserve electric energy.

The project would use an electric-driven water chilling unit which would require less energy to cool the building than would conventional air conditioners. Water pumping systems would use innovative designs and load controls in order to reduce necessary pumping power.

The air circulation system would feature low pressure air distribution with individual air handling units on each floor to reduce necessary fan horsepower and provide the opportunity to reduce "off-hour" energy use. The air circulation system for each floor could be operated independently.

- Containers for the storage of recycable materials (such as glass, metal, computer cards and newspaper) would be located adjacent to loading docks on the ground floor of the building.

MEASURES NOT INCLUDED IN THE PROJECT

The project sponsor could consider incorporating load management measures to lower the building energy demand during PG&E peak-hour demand periods. This would depend on potential savings after an economic analysis.

UTILITIES AND PUBLIC SERVICES

MEASURES PROPOSED AS PART OF THE PROJECT

An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services (OES), to insure coordination between the City's emergency planning activities and the project's plan and to provide services to building occupants in the event of an emergency. The project's plan would be reviewed by the OES and implemented by building management insofar as feasible before issuance by the Department of Public Works of final building permits.

To expedite implementation of the City's emergency response plan, the project sponsor would prominently post information for building occupants concerning what to do in the event of a disaster.

To reduce the demand on police protection services, the project would incorporate internal security measures, such as internal security personnel, well lighted entries, and alarm systems.

The project would incorporate low-flow faucet and toilet fixtures to reduce water consumption and wastewater generation.

LAND (Topography, Soils, Geology)

MEASURES PROPOSED AS PART OF THE PROJECT

A detailed foundation and structural design study would be conducted for the building by a California licensed structural engineer and a geotechnical consultant. The project sponsor would follow the recommendations of these studies during the final design and construction of the project.

If dewatering were necessary, groundwater observation wells would be installed by the contractor to monitor the level of the water table and other instruments would be used to monitor potential settlement and subsidence. If, in the judgment of City engineers, unacceptable subsidence occurs during construction, groundwater recharge would be begun to halt the settlement. This might cause a delay in construction.

V. Mitigation Measures

Any groundwater pumped from the site would be retained in a holding tank to allow suspended particles to settle, if this is found necessary by the Industrial Waste Division of the Department of Public Works, to prevent sediment from entering the storm drain/sewer lines.

During construction, the contractor would sweep streets manually or mechanically to prevent siltation of storm drains and generation of dust. The contractor would also confine construction equipment, maintenance and refueling activities to locations where petroleum spillage would be contained.

If necessary, excavation pit walls would be shored up and protected from slumping or lateral movement of soils into the pit. Shoring and sheeting with soldier beams could be used for this purpose.

Windows would be installed in the project in such a way as to minimize the possibility of breakage during an earthquake, and to maximize the possibility of glass falling inward, rather than outward, should windows break.

CULTURAL

MEASURE PROPOSED AS PART OF THE PROJECT

Should evidence of cultural or historic artifacts of significance be found during project excavation, the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board would be notified. The project sponsor would select an archaeologist or other expert to help the Office of Environmental Review determine the significance of the find and whether feasible measures, including appropriate security measures, could be implemented to preserve or recover such artifacts. The Environmental Review Officer would then recommend specific mitigation measures, if necessary, and recommendations would be sent to the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

VI. Significant Environmental Effects

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

This chapter identifies impacts that could not be eliminated or reduced to an insignificant level by mitigation measures included as part of the proposed project, or other mitigation measures that could be implemented, as described in Chapter V, Mitigation Measures, pp. 97-103.

A. TRANSPORTATION

- The project would provide about 35 long-term valet parking spaces and would generate a demand for about 250 long-term and 30 short-term spaces.

B. CUMULATIVE OFFICE DEVELOPMENT

The project would be part of a trend of denser development in Downtown San Francisco. Cumulative increases in the amount of office space would continue regional growth in service-sector and office headquarters activities and employment. The project would contribute to cumulative traffic increases Downtown and cumulative increases in passenger loadings on BART, Muni and other transit agencies.

VII. ALTERNATIVES TO THE PROPOSED PROJECT

Several alternatives to the project as proposed are described and compared below. All of these project alternatives contemplate development at the same location as the proposed project. The project sponsor has considered each of these alternatives.

A. ALTERNATIVE ONE: NO TRANSFER OF PERMITTED BASIC GROSS FLOOR AREA

This alternative would consist of a 15-story office building similar in design to the proposed project, about 200 ft. tall, developed on the project site (see Figure 21, p. 106). (Note that the drawing is conceptual only and does not attempt to portray facade materials or architectural detailing.) It would contain approximately 224,000 gross sq. ft. of commercial space, representing an FAR of about 14:1. There would be one level of retail and banking space containing a total of about 10,500 sq. ft., and 14 floors of office space containing about 213,500 sq. ft. There would be no residential development on the site and no transfer of permitted basic gross floor area from adjacent parcels would be used to increase the amount of commercial space.

Under Alternative One there would be two levels of subsurface parking, accommodating about 39 vehicles; the parking levels and building foundation would not extend beneath public sidewalks and a revocable encroachment permit would not be required. Two loading docks would be accessible at grade from Spring St. to conform with the requirements of the City Planning Code and recommendations in City Planning Commission Resolution No. 9286. As with the proposed project, mechanical equipment would be located in the basement and in a rooftop penthouse, and there would be a two-story pedestrian arcade along the California St. frontage.

This alternative would be similar to the project in design and form, but the building tower would be about 120 ft. shorter than the proposed project. Land use effects of Alternative One would be similar to those of the proposed project except that the amount of office use would be reduced about 35%. As with the project, this alternative would not satisfy on-site any of the housing demand which would be generated by the office space.

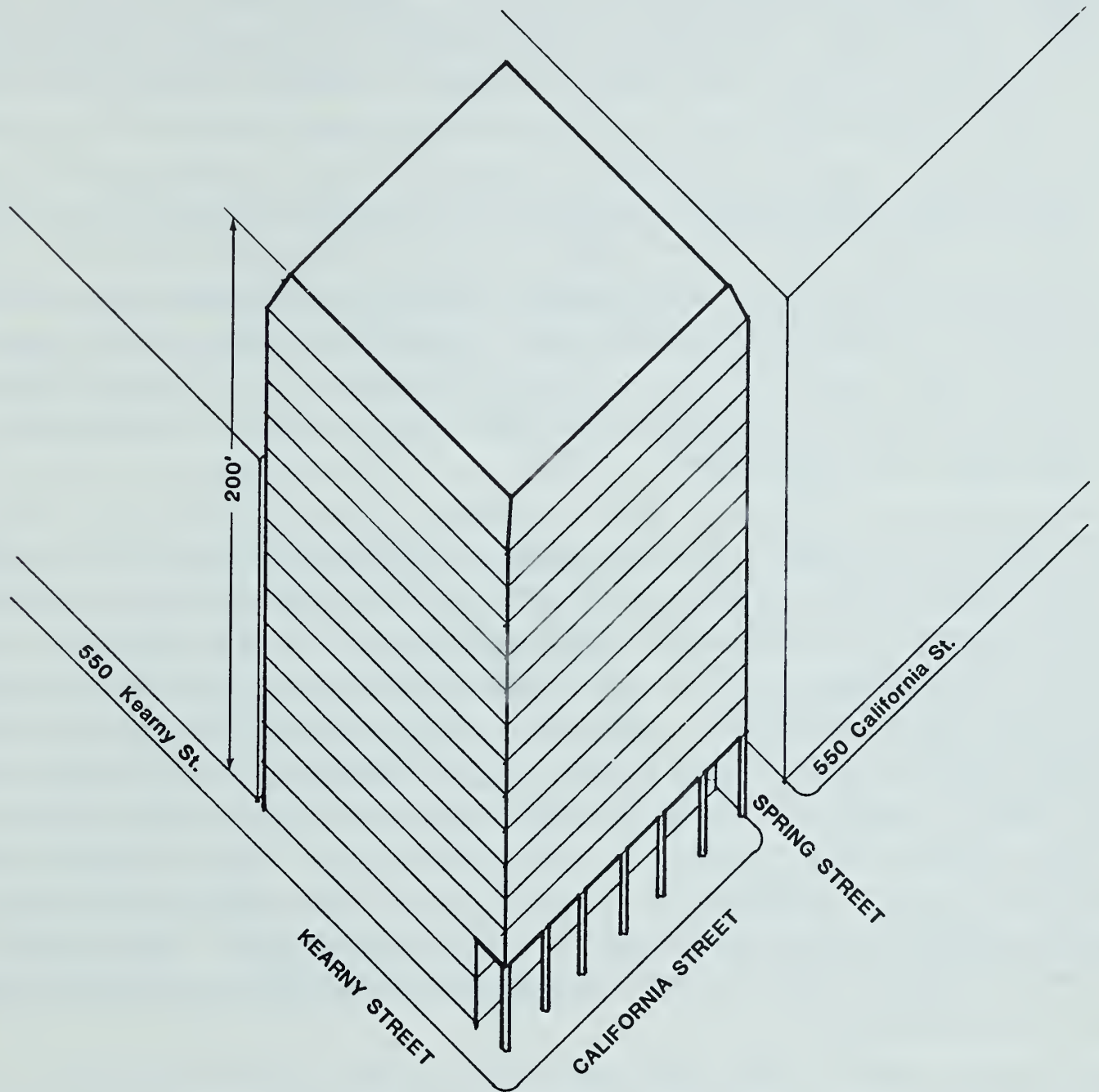


FIGURE 21: Alternative One –
No Transfer of Permitted
Basic Gross Floor Area

SOURCE: Gensler and Associates, Architects

VII. Alternatives to the Proposed Project

Housing demand under this Alternative would be for about 190 units, about 100 fewer than for the proposed project. Urban design and shadow effects of this alternative would be reduced from the proposed project because of the decreased building height. The building tower would be more visible than the existing structure on the site. Pedestrian-level views from near the site would be similar to those of the project as proposed except for the shorter building height.

This alternative would result in demolition of the existing structure on the site. Transportation, air quality and noise impacts associated with building construction would generally be similar to the proposed project, although the construction period would be shorter due to the decreased building size. Potential dewatering impacts would be increased under this alternative as two subsurface parking levels would be provided. Energy consumption from building operations would be reduced by about 35% in comparison to the proposed project.

Operational traffic impacts on street segments surrounding the site would be reduced under Alternative One, as travel in all modes would be about 45% less than for the proposed project. The parking deficit under Alternative One would be approximately 200 spaces. The estimated number of net peak-hour person-trips from this alternative would be about 500, in comparison to about 950 peak hour trips for the proposed project. Impacts on Muni and the regional carriers would be proportionately less than those from the proposed project and represent less than one percent of overall demand. Pedestrian flows would be similar to those from the proposed project. With two loading docks provided under this alternative, the occurrence of pedestrian conflicts with trucks and service vehicles would be less frequent than for the proposed project. The frequency of curbside loading for freight and passenger vehicles would be similar to, but less than, that of the proposed project.

The project sponsor has rejected this alternative because it would be an economic underuse of the site and because it would result in a building which the sponsor considers less attractive than the project as proposed. In order to develop the maximum floor area and retain the large floor sizes dictated by current market demands, the building would have a bulkier appearance than the project. In the context of the square buildings of similar height around the building, this alternative would contribute to a benched appearance of roof lines, and would not provide the same level of stepping in scale achieved with the project.

VII. Alternatives to the Proposed Project

B. ALTERNATIVE TWO: GUIDING DOWNTOWN DEVELOPMENT - COMMERCIAL USE

This alternative would be designed to comply with the guidelines contained in Guiding Downtown Development (GDD) published by the Department of City Planning in July 1982. GDD contains a series of regulatory proposals for managing development in downtown San Francisco affecting size, design, use and location of major buildings. The report proposes changes in the City Planning Code regulations for the C-3 Planning Code Use Districts pertaining to housing, transportation, open space and historic preservation.

This alternative would be a 17-story office building, 240 ft. tall, 110 ft. less than the 350 ft. height limit proposed in GDD and 80 ft. less than the proposed project. The total area would be 233,200 sq. ft.: 219,500 sq. ft. of office, a 2,000-sq.-ft. lobby, 10,000 sq. ft. of retail and 1,625 sq. ft. of loading and service. About 192,000 gross sq. ft. would represent the GDD base commercial FAR of 12:1 for the site. In addition, the sponsor would purchase and transfer to the site, under Section 127(a) of the City Planning Code, about 31,000 sq. ft. of basic permitted floor area from Lot 16 of Assessor's Block 240. The transfer of basic permitted gross floor area under this alternative would be about 85,100 sq. ft. less than the amount proposed to be transferred to the site for the project. The transfer of floor area for Alternative Two would result in a total building FAR of about 14:1 (excluding retail and service area). Alternative Two would contain five retail establishments on the ground floor, with a maximum area of 2,000 sq. ft. each. Under GDD, this area would be exempt from FAR calculations. This alternative would also contain about 9,300 sq. ft. of recreation/open space: 1,875 sq. ft. in the pedestrian arcade along California St. and 7,400 sq. ft. in balconies at the 12th and 17th floors (public view and sun terraces). This area was assumed to be exempt from the FAR calculation, just as plazas, etc., are under the existing Planning Code.

This alternative would have about 110,000 fewer square feet of office area than the project, about 3,500 more sq. ft. of retail space, and about 6,600 more sq. ft. of recreational/open space. Mechanical equipment would be located in the basement and in a rooftop penthouse; the subsurface level would not extend beneath public sidewalks and a revocable encroachment permit would not be required. Under Alternative Two there would be no off-street parking for passenger vehicles to comply with GDD guidelines and Master Plan policies which discourage the addition of new long-term and short-term

VII. Alternatives to the Proposed Project

parking facilities in the Downtown core area. Two loading docks would be provided at grade from Spring St. to comply with the recommendations for off-street loading contained in GDD and the recommendations of City Planning Commission Resolution No. 9286.

This alternative would be built to lot lines on floors one through 11, with floor areas of 15,500 sq. ft. per floor (excluding the first and second floors, which would be smaller because of the two-story pedestrian arcade - see Figure 22, p.110). The building would step in from Kearny and Spring Sts. at the 12th floor (top of the mid-tower zone) as recommended by GDD bulk limits. Floor areas would be 11,500 sq. ft. per floor. The top (17th) floor would step in again on the north and south sides of the tower, and would contain 8,100 sq. ft., the maximum allowed under GDD. The roof-top mechanical floor would have sloping sides forming 50 degree angles to the roof line, as recommended by GDD guidelines for interesting roofs.

This alternative would provide the base amount of commercial space permitted in GDD plus the transfer to the site of about 31,000 sq. ft. of basic permitted floor area from the adjacent parcel, Lot 16. The GDD guidelines specify that housing be provided at the rate of 640 sq. ft. of housing per 1,000 sq. ft. of office space, with a unit requirement of 0.9 units per 1,000 sq. ft. of office space. Using this formula, approximately 140,500 gross sq. ft. of residential space (about 198 dwelling units) would meet the proposed housing provision. If this amount of residential space were developed on the site it would represent an FAR of about 9:1, 4:1 more than permitted by GDD. Required housing would be constructed off-site. See Alternative Three, p.112, for a discussion of an on-site housing alternative.

This alternative would incorporate art work into the lobby areas of the building. The proposed art requirement in GDD specifies that investment in art be equal to at least one percent of total construction costs. The proposed guidelines recommend the provision of non-residential recreation and open space, in a ratio of one sq. ft. of recreation/open space per 25 sq. ft. of new building area, which may be provided in a variety of ways. As noted, this alternative would contain a two-story pedestrian arcade and sun and view terraces in excess of the requirement of about 8,900 sq. ft.

Land use effects of Alternative Two would be similar to those of the proposed project except that the amount of office space would be reduced about 30% and the amount of ground-floor retail space would be increased about 54%. The housing demand generated

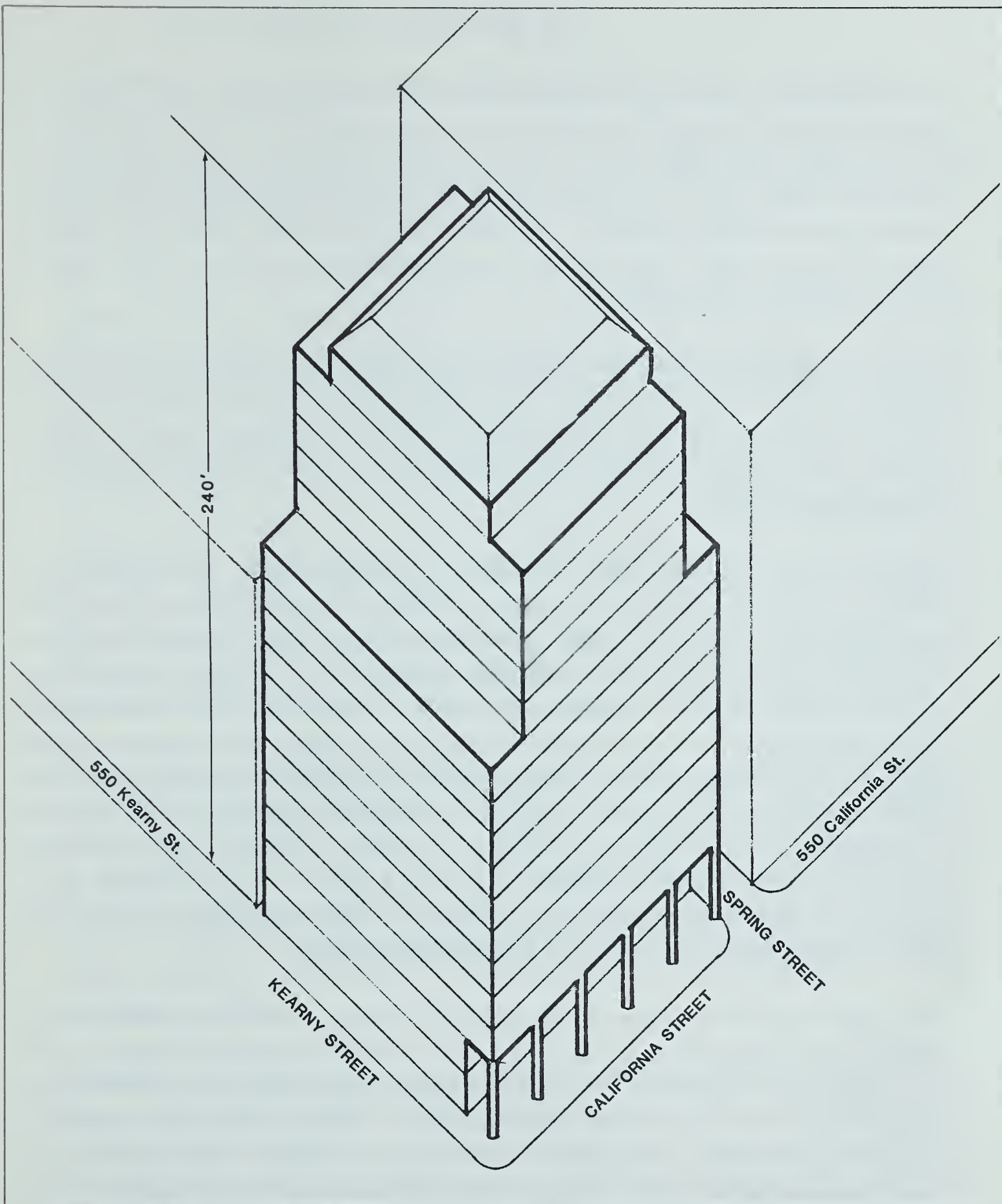


FIGURE 22: Alternative Two –
Guiding Downtown
Development – Commercial
Use

SOURCE: Gensler and Associates, Architects

VII. Alternatives to the Proposed Project

by this alternative, about 198 residential units, would be about 50 fewer than the project demand of about 290 units. The building tower would be about 80 ft. lower in height than the project, but more visible than the existing structure on the site. Shadows cast by this alternative would be about 25% shorter than project shadows, and reduced in width at the furthest points because of setbacks. The setback at the 12th floor (at the 150-ft. height level of this alternative) would provide a visual relationship to the 11- and 13-story buildings adjacent to the project site.

As with the proposed project, this alternative would result in demolition of the existing structure on the site. Transportation, air quality and noise impacts associated with building construction would generally be similar to those for the proposed project. Energy consumption for building operations under Alternative Two would be about 30% less than for the proposed project.

Operational traffic impacts would be similar to the proposed project. The number of net peak-hour person-trips (440) created under this alternative would be about 40% less than the number which would be generated by the proposed project (950). Relative impacts on Muni and the regional transit carriers would be proportionate and represent less than one percent of overall demand. Pedestrian flows would be reduced about 20% from those of the proposed project. No off-street parking would be provided; this alternative would eliminate any potential conflicts between pedestrians and vehicles in the curb cut of the project's garage ramp and reduced at Spring St. Pedestrian/traffic/transit conflicts would be reduced with this alternative. The estimated demand for parking would be for 235 spaces, 195 long-term and 40 short-term (less than 6 hours). With two loading docks provided, the occurrence of pedestrian conflicts with trucks and service vehicles and curbside loading would be less than that of the proposed project.

The project sponsor has rejected this alternative because it would not maximize the allowable developable area on the site, and as such, would be an economic underuse of the site. The sponsor has also rejected this alternative because publically accessible open space at the 12th and 17th levels could present a security problem and negatively influence marketability. The sponsor believes that the project would constitute an attractive contribution to San Francisco's office district, and that conforming to bulk limitations in GDD are not necessary to achieve a high quality design. Further, the sponsor believes that the project already responds to important recommendations contained in GDD: the project would incorporate a stepped design at the roof, and three loading stalls.

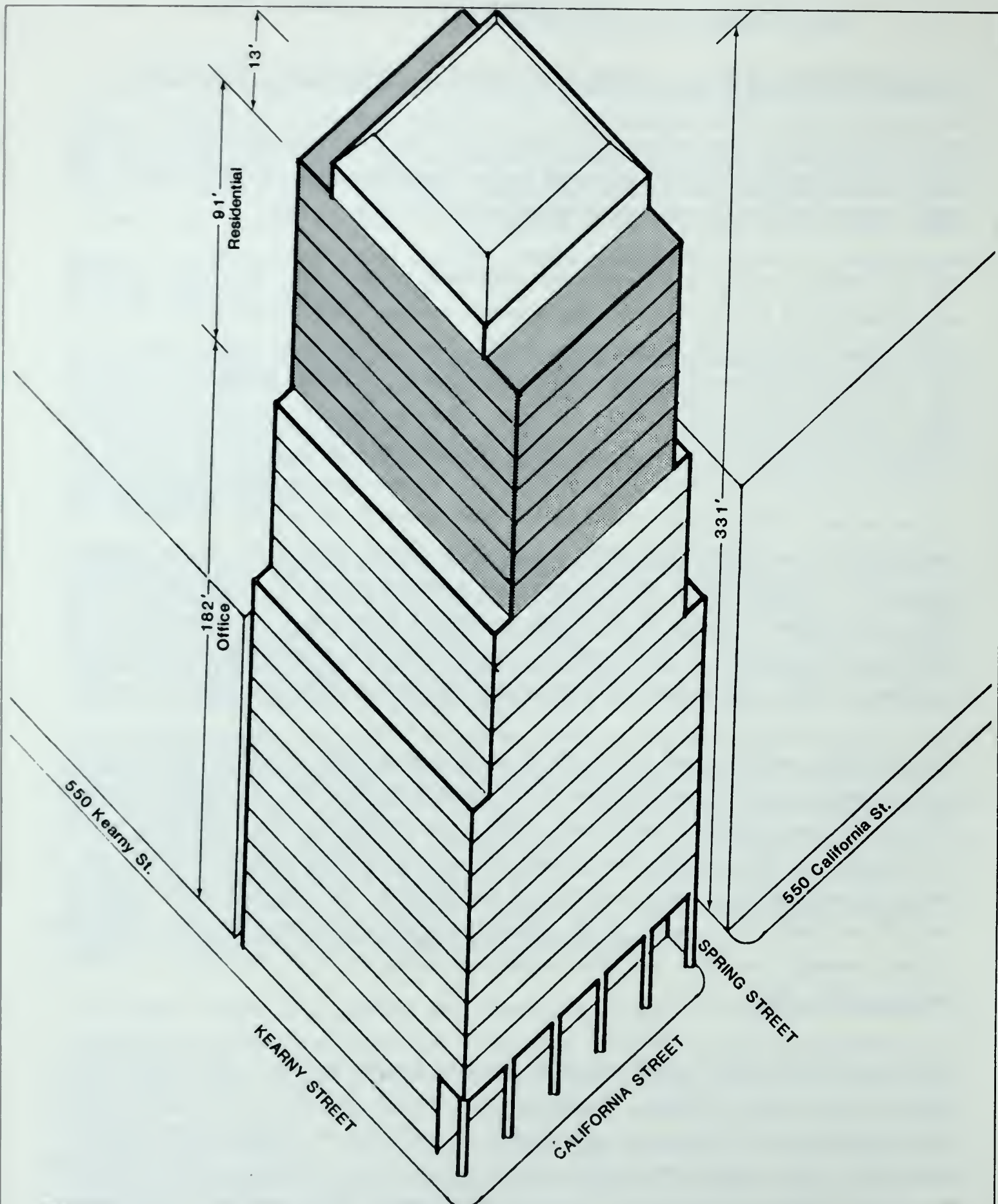
C. ALTERNATIVE THREE: GUIDING DOWNTOWN DEVELOPMENT - MIXED-USE

This alternative would be designed to comply with the guidelines contained in Guiding Downtown Development (GDD) published by the Department of City Planning in July 1982. Alternative Three would include development of on-site housing.

This alternative would be a 24-story combined office and residential building, approximately 330 ft. tall. The structure would contain about 217,000 gross sq. ft. of office space (192,000 sq. ft. representing the GDD base commercial FAR of 12:1 for the site and 25,000 sq. ft. transferred from the 550 Kearny St. building), 10,000 sq. ft. of retail space, and about 12,100 sq. ft. of open space. (Bulk limitations in GDD would preclude transfer of the total 31,000 sq. ft. of unused development rights from Lot 16 under the 12:1 FAR.) Office space would be about 50,000 sq. ft. less than the office space proposed for the project. Retail space would be increased about 3,500 sq. ft. Residential use, consisting of 73 condominiums, would occupy about 80,000 gross sq. ft. for an additional FAR of 5:1. The overall FAR of this alternative would be about 19:1 (excluding retail and open space/recreation area, which would be exempt from the FAR calculation. This alternative would be 330 ft. high, about 10 ft. taller than the proposed project, and 20 ft. less than the 350 ft. height limit for the site recommended in GDD (see Figure 23, p. 113).

This alternative would include two levels of subsurface parking, accessible via Spring St., accommodating about 80 vehicles (one space per residential unit). All parking would be allocated for the residential units; there would be no parking for the commercial portion of the building. The parking level would not extend beneath public sidewalks and a revocable encroachment permit would not be required. Two loading docks would be provided at grade from Spring St. to comply with the recommendations for off-street loading contained in GDD and the recommendations of City Planning Commission Resolution No. 9286.

Alternative Three would include separate lobby and elevator access to the residential and office portions of the building. The ground floor would have five retail establishments with a maximum of 2,000 sq. ft. each (this area would not be counted toward the FAR under GDD). The second floor would contain a 4,500 sq. ft. cultural facility and office uses. The building would contain 14 and one-half floors of office space and eight floors of housing, for a total of 24 stories. Mechanical equipment would be located in the basement level and in a rooftop penthouse.



LEGEND


 Residential Use

FIGURE 23: Alternative Three – Guiding Downtown Development – Mixed Use

SOURCE: Gensler and Associates, Architects

VII. Alternatives to the Proposed Project

This alternative would be built to lot lines on floors one through 11, with floor areas of 15,500 sq. ft. per floor (excluding the first and second floors, which would be smaller because of the two-story pedestrian arcade – see Figure 22). The building would step in from Kearny and Spring Sts. at the 12th floor (top of the lower-tower zone) as required by GDD bulk limits. Floor areas would be 13,800 sq. ft. per floor on floors 12 through 16. A third step would be located above the 16th floor (top of the mid-tower zone); floors 17 through 23 would contain about 10,300 sq. ft. The top (24th) floor would step in again on the north and south sides of the tower, and would contain 8,100 sq. ft., the maximum allowed under GDD. The roof-top mechanical level would have sloping sides forming 50 degree angles to the roofline, as recommended by GDD guidelines for interesting roofs. According to Section 134 of the City Planning Code, a 25% rear yard would be required at each residential level in this C district. GDD includes a provision to allow the City Planning Commission to reduce this requirement, provided adequate light and air were maintained. Because of the setback at the 12th and 17th floors, it is assumed that this alternative meets this provision.

This alternative would provide the base amount of commercial space permitted in GDD plus 25,000 sq. ft. of transferred floor area from an adjacent parcel. The GDD guidelines specify that housing be provided at the rate of 640 sq. ft. of housing per 1,000 sq. ft. of office space, with a unit requirement of 0.9 units per 1,000 sq. ft. of office space. Using this formula, approximately 140,000 gross sq. ft. of residential space (about 195 units) would meet the proposed housing provision, representing an FAR of about 9:1. As the site's entire allowable developable floor area under GDD would be built, this amount of residential space could not be accommodated on the site. If 80,000 sq. ft. of housing were provided on-site, for an additional FAR of 5:1, about 60,000 sq. ft. of housing (or 122 units) would have to be constructed off-site to meet the recommended total housing provision.

This alternative would incorporate art work into the ground floor of the building to respond to the proposed art requirement in GDD. Open space for building residents would be provided by private balconies for individual condominiums to satisfy the usable open space requirements of Section 135 of the City Planning Code. The proposed guidelines recommend the provision of non-residential recreation and open space, which may be provided in a variety of ways. This alternative would contain a two-story pedestrian arcade (about 1,900 sq. ft.), sun and view terraces (about 5,800 sq. ft.), and a cultural

VII. Alternatives to the Proposed Project

facility on the second floor (about 4,500 sq. ft.) to satisfy the requirement of about 10,100 sq. ft. GDD would allow residential open space to partially satisfy the open space requirement for a mixed-use building.

Land use effects of Alternative Three would differ from the project as proposed; the amount of office space would be reduced about 34%, the amount of retail space would be increased about 54% and residential use would be developed on-site. The housing demand generated by this alternative would be for about 195 residential units, approximately 100 fewer than the demand which would be created by the proposed project; this demand would be partially met by the 73 housing units which would be included under Alternative Three. Through the provision of housing, this alternative may contribute to increased 24-hour activity in the Financial District and increased demand for domestic-oriented retail services in the downtown. The building tower would be more visible than the existing structure on the site, and about 10 ft. taller than the proposed project. The effect of this alternative on shadow patterns in the site vicinity would be a minor increase in length of shadows compared to project shadows because of the increased building height, and a reduction in the width of shadows due to setbacks at the 12th, 17th and 24th floors. The setback at the 12th floor (at the 150-ft. height level of this alternative) would provide a visual relationship to the 11- and 13-story buildings adjacent to the project site.

As with the project, this alternative would result in demolition of the existing structure on the site. Transportation, air quality and noise impacts associated with building construction would generally be similar to the proposed project. Energy consumption for the office portion of the building under Alternative Three would be about 34% less than for the office portion of the project. Residential energy consumption would also occur for Alternative Three. Residential uses commonly consume about the same amount of natural gas and about twice as much electricity, on a per sq. ft. basis, as office uses. For this alternative, total electrical consumption would be about the same as for the proposed project, while natural gas use would be about 20% less; total energy consumption for Alternative Three would be similar to the project.

Operational traffic impacts and Muni impacts would be about half those of the proposed project due to decreased office space and no on-site parking spaces for office users. The number of net peak-hour person-trips (560) from this alternative would be about 40% less than for the proposed project (950). The number of transit trips regional carriers would be less about half those generated by the project and represent less than one percent of overall demand. Pedestrian flows on sidewalks adjacent to the building would be altered

VII. Alternatives to the Proposed Project

from project conditions; the reduced amount of office space under Alternative Three would lessen peak-hour pedestrian travel from the site. Peak-hour trip directions to the parking facility would be reversed from those with the project; total trips to the parking facility would be increased because of the increase in parking spaces under this alternative. The parking deficit (for work-related parking demand) would be greater than that of the proposed project by approximately 35 automobiles. The occurrence of curbside loading would be similar to project conditions. Pedestrian and service vehicle conflicts would be reduced in comparison to the proposed project because only two off-street loading spaces would be provided under Alternative Three. Conflicts between pedestrians and autos using the residential parking spaces would be increased.

The project sponsor has rejected this alternative because it would not allow the development of the allowable maximum developable area and so would be an economic underuse of the site, and because the sponsor feels that the site is not a suitable location for residential use.

D. ALTERNATIVE FOUR: NO PROJECT

This alternative would entail no change to the site. The existing Fireman's Fund Building would be retained. As the present office tenants intend to vacate the property at the end of 1982, it would be expected that the building would be occupied by new tenants and remain in office use.

In general, the environmental characteristics of this alternative would be substantially as described in the Environmental Setting Section of this report (see Section III, pp. 20-42, for a discussion of existing conditions). Transportation, air quality and noise impacts associated with building construction would not occur. Transportation, transit and air quality conditions (described in Section IV of this report) as 1985 base conditions with cumulative development, but without the project, would exist on streets around the site in 1985. There would be no change in the demand from the site for community services.

This alternative would preserve options for future development of the site. It is not acceptable to the project sponsor because it would not maximize the allowable developable area and so would be an economic underuse of the site.

VII. Alternatives to the Proposed Project

This alternative could result in the development of other office space, possibly a high-rise building comparable to the project at another location. Development elsewhere in Downtown San Francisco would generally result in impacts as described for the project. The impacts of such a building, if developed at a location outside of San Francisco, would largely depend upon the location chosen and cannot now be accurately determined. Development of the project at a different location has been rejected by the project sponsor because of existing interests in the site and the sponsor's conviction that the project site is a prime location for office space in the San Francisco.

VIII. SUMMARY OF COMMENTS AND RESPONSES

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A. INTRODUCTION

This document contains summaries of the public comments received on the Draft Environmental Impact Report (DEIR) prepared for the proposed 580 California St. Office Building, and responses to those comments.

All substantive spoken comments made at a public hearing before the City Planning Commission on November 4, 1982, and all written comments received during the public review period from October 1, 1982 through November 4, 1982, have been reviewed and are presented herein by direct quotation, edited to omit repetition and nonsubstantive material only.

Comments and responses are grouped by subject matter and are arranged by topics corresponding to the Table of Contents in the Draft EIR. Each group of comments is followed by its set of responses; the order of the responses under each topic follows the order of comments under that topic. As the subject matter of the topic may overlap that of other topics, the reader will occasionally be referred to more than one group of Comments and Responses to review all information on a given topic. Where this occurs, cross-references are provided.

These comments and responses will be incorporated into the Final EIR as a new chapter. Text changes resulting from comments and responses will also be incorporated into the Final EIR, as indicated in the responses.

B. LIST OF PERSONS COMMENTING

Susan Bierman, City Planning Commissioner

Norman Karasick, City Planning Commissioner

C. Mackey Salazar, City Planning Commissioner

John Elberling, San Franciscans for Reasonable Growth

Sue Hestor, Attorney, San Franciscans for Reasonable Growth (Hearing Testimony and Letters dated November 4 and October 8, 1982) Letters submitted by Ms. Hestor were originally submitted as comments on the 333 Bush St. Draft EIR, and the 135 Main Draft EIR Supplement; page and table references and figures have been changed where necessary to correspond to the subject EIR. Comments deriving from these letters are underscored.

David Jones (Letter dated November 4, 1982)

Kay Pachtner, Consumer Action and San Franciscans for Reasonable Growth (Hearing Testimony and Letter dated November 4, 1982)

Michael Levin

Randy Ritchie

Kent E. Soule (Letter dated November 3, 1982)

NOTE: Where a commentator submitted written comments that paralleled oral comments made at the public hearing on the Draft EIR, the written comments have been incorporated into the hearing testimony and are indicated by underscores in the comment.

C. SUMMARY OF COMMENTS AND RESPONSES

LAND USE

ACTIVE PROJECTS WITHIN A THREE-BLOCK RADIUS OF THE PROJECT SITE

COMMENT

"On p. 20, your project list is missing all of the office conversions. You have a little diagram of the projects that are active in the area, and you marvelously omit all of the conversions. There is one at Commercial and Montgomery, there is one at Stockton and Sutter, and there is one on Sutter St. between Geary and Post. It's on that little alley, and ... I don't know the number of the building. It's not an address on Stockton St., it's an address on that little alley street. But it's a building that fronts on Kearny St., and that's in this three-block radius, and it isn't there at all. Therefore, I ask ... that your staff go over the map, pick up the office conversions, and pick up the other projects that are missing. Also, you are missing on p. 22 the proposed Kearny/Pine office building, which is kicking around your office and the Office of Environmental Review. It was for a while a proposal for a hotel. It's now been changed to an office building that's half a block away, and it's a big office building. It belongs in the EIR." (Sue Hestor)

RESPONSE

The conversion at Commercial and Montgomery, 569 Sacramento St. (81.610 ED) has been added to Figure 9. The conversion near Stockton and Sutter Sts., 44 Campton Pl. (82.870E), is not within the 3-block radius boundary shown in Figure 9, p. 21 of the EIR. The conversion on Sutter St. is the Sloane Building at 216 Sutter St.; this has been added to Figure 9. In addition to these conversions, the following buildings have also been added to Figure 9: 736 Montgomery St.; 401 Washington St.; 582 Bush St.; 453 Grant Ave.; and 160 Sansome St. All of these developments were included in the analysis of cumulative effects contained in the EIR, but erroneously omitted from the graphic.

As noted in the comment, the Pine/Kearny proposal was originally a hotel, and is now an office building. This project is in very early stages of preliminary review by the Office of Environmental Review, and is considered too tentative to include in the cumulative analysis (see also the discussion on p. 129 under the subheading "Cumulative Downtown Development List").

The last paragraph on p. 20 and 1st para. on p. 22 of the EIR have been revised to read as follows:

There are 18 office buildings, including conversions, under construction or approved within three blocks of the project site (see Figure 9). These developments, upon full buildout, will provide about 2.8 million gross sq. ft. of net new office space and 94,250 gross sq. ft. of net new retail floor area ("net new" refers to the increase in office and retail floor area after office and retail space demolished to clear sites for the new buildings has been subtracted). In addition, four office developments are proposed within three blocks of the site and are under formal environmental review by the Department of City Planning (see Figure 9): 569 Sacramento St.; the Russ Tower addition at 350 Bush St.;

VIII. Summary of Comments and Responses

333 Bush St.; and 222 Kearny St. If approved and constructed, these developments would provide about 1.1 million gross sq. ft. of net new office floor area and 12,500 gross sq. ft. of net new retail floor area.

Figure 9 has been revised to show the relevant buildings, including conversions (see p. 21 and 125 of this document).

DEVELOPMENT ACTIVITY ON KEARNY ST.

COMMENT

"[W]hat I really question is you don't have anything in here that deals with the explosion of office space and the explosion of activity on Kearny St. Kearny St. has had an awful lot of activity in the past two years. You have Crocker Center on it; you have San Francisco Federal Savings & Loan; you have another proposal on that same block. It think it's 222 Kearny, something like that. That is pending under review. You have the Kearny and Pine building, you have 550 Kearny, and you've got other buildings on Kearny that are still kicking around, including that conversion. I forgot the name of the furniture company that's the conversion on Sutter.

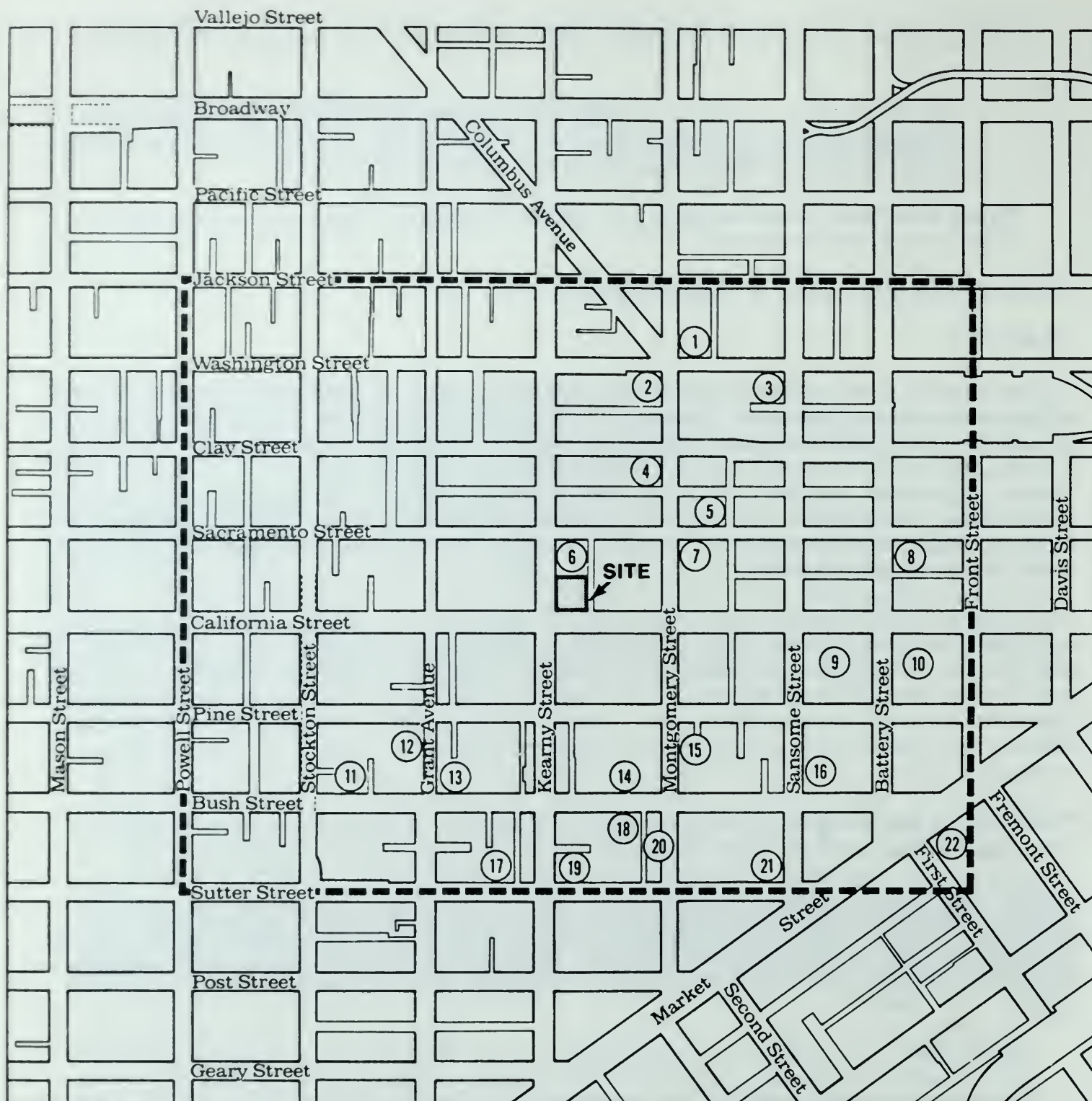
"The bottom line is that Kearny St., which used to be a mixed area, is becoming dominantly an area of very large, very massive office buildings, that is displacing retail uses and is changing the character of Kearny St., which is the nearest thing to a broad, sunlit street that you have downtown. It is just about the only street when you go up it to the north that has some sunlight on it. And you don't have anything in here that would indicate that there's been some things happening on Kearny St. I think you need to have it in here.

"It's a lot of square feet. It's three to four million sq. ft. off the top of my head, and that's probably an underestimate. So please put in here what's going on on Kearny St.

"[N]ote that recent projects approved by the commission have shifted the scale of buildings between Kearny and Montgomery from mixture of low-rise, human-scaled, small buildings to block-busters with pretty much straight-up walls, at least for 10-15 stories, squeezing out small properties, small retail establishments, small office spaces at lower rents." (Sue Hestor)

RESPONSE

Between Market St. and Columbus Ave., a total of five office buildings are recently completed or under construction, approved or under review on Kearny St. Those under construction or recently completed are: Crocker Bank Center (626,000 gross sq. ft. of office) and 550 Kearny St. addition (71,400 gross sq. ft. of office). The Post/Kearny (San Francisco Federal Savings and Loan) building is approved (246,800 gross sq. ft. of office). The two developments under review are: 580 California St. (329,500 gross sq. ft. of office), which is the subject of this report; and 222 Kearny St. (269,400 gross sq. ft.). The conversion of the space formerly occupied by the Sloane furniture company (153,300 gross sq. ft. of office) is not on Kearny St.; it is located at 216 Sutter St. about a quarter of a block from Kearny St. All of these developments are included in the cumulative analyses contained in the EIR. Another development at Pine and Kearny has been suggested. As noted in the previous response, this project is in preliminary stages of review, and is considered too tentative to include in the analysis of cumulative impacts.



LEGEND

--- 3-Block Radius Boundary

1. 736 Montgomery (under construction)
2. Montgomery/Washington (under construction)
3. 401 Washington (approved)
4. Bank of Canton (approved)
5. 569 Sacramento (under review-conversion)
6. 550 Kearny Addition (under construction)
7. 456 Montgomery (under construction)
8. 353 Sacramento (under construction)
9. 333 California (approved)
10. 122-130 Battery (approved)
11. 582 Bush (approved)
12. 453 Grant (approved)
13. 466 Bush (approved)
14. 350 Bush-Russ Tower (under review)
15. 250 Montgomery at Pine (approved)

16. 160 Sansome (approved)
17. Sloane (under construction-conversion)
18. 333 Bush (under review)
19. 222 Kearny (under review)
20. 101 Montgomery (under construction)
21. One Sansome (under construction)
22. Central Plaza (approved)



FIGURE 9: Office Projects Under Construction, Approved and Under Review Three Blocks of Project Site (as of October 1982)

SOURCE: Department of City Planning and Environmental Science Associates, Inc.

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The total office space on Kearny St. recently completed, under construction or approved is 994,200 gross sq. ft. The total office area under review on Kearny St. is 598,900 gross sq. ft. If all this space were constructed, the new office area would equal about 1.6 million gross sq. ft. After subtracting existing office space to be demolished to clear sites, the net increase in office floor area would be about 1.2 million gross sq. ft. All of these buildings, except for the 550 Kearny St. addition, include retail space (including banking space) and/or open space of some type. New retail area would be 103,600 gross sq. ft.; less retail area demolished to clear sites, the net new area would be 44,160 gross sq. ft. Several of the developments also include parking. The 580 California St. project would replace an existing office building; 222 Kearny St. would replace retail and office uses; Crocker Center replaced hotel, parking, retail and office uses; Post/Kearny (S. F. Federal) will replace banking, retail and office uses and a restaurant. The 550 Kearny St. addition would not affect the existing use on that site.

The new developments would result in a net increase in retail space. Comparative diversity in the types of retail uses between old and new is not known, since much of the space is not occupied, not completed or not constructed.

Crocker Center replaced both low- and mid-rise (3- to 8-story) buildings with a 37-story high-rise tower, a low-rise galleria, and will include removing about 10 stories from the banking temple at Post and Montgomery Sts. S. F. Federal will replace low- and mid-rise (3- to 7-story) buildings with a 16-story high-rise building. The 19-story 222 Kearny St. building would replace low-rise (4- to 6-story) buildings. The 580 California St. project would replace a 4-story low-rise building with a 23-story high-rise building. The 550 Kearny St. addition added five floors to an existing structure, resulting in an 11-story mid-rise building.

High-rise buildings on Kearny St. tend to occur most frequently on the east side of the street, corresponding to the change in zoning districts: the C-3-O district ends just west of Kearny St., and the C-3-G and C-3-R districts begin.

The project would not displace any small retail or office uses. The existing users of the Fireman's Fund building are relocating for reasons not related to the project.

CHINATOWN

COMMENT

"There is no discussion in here about Chinatown. There is no discussion about housing on Grant Ave., housing on Kearny, no discussion about any housing on alleyways. We ought to know if there are people living near here. We need to know, No. 1, how they are affected by air quality, but also in here in the alternatives they say that they don't think this is a good site for housing. I might or might not agree with them, but I think we need to know if people are already living here, and there is no indication in this whether they are or not. We need some discussion in this EIR of the dire need for open space in Chinatown. It's the most densely populated part of the City. It's the one part we haven't gotten any open space for, to speak of. And this building is not providing any open space. It has an arcade, but I think if we get a better description of that arcade, we're going to see that that's pretty much like the sidewalk. [W]e are really at a crisis spot in terms of open space." (Susan Bierman)

RESPONSE

The percentage of total developed area devoted to residential uses (both dwelling units and residential hotels) on blocks surrounding the project site is shown on Figure A, p. 8. The figure also shows the percentage of area devoted to office and retail uses (including banking). The project site is located on Assessor's Block 240. Chinatown is located to the northwest and west of the project site, and a survey of uses around the project block indicates that residential uses occur more often in those directions.

The residential uses share their respective blocks with a wide variety of other uses, such as parking, restaurants, retail and office.

The existing building contains no residential uses and the project would not include residential uses. While residential uses are located in the vicinity of the project, the sponsor believes that the site itself is not an optimal location for housing, and that more suitable sites have been identified by the City for the production of housing (including south of Market and the Van Ness Corridor). The sponsor had the option of developing on-site housing in response to the housing requirement, or contributing to the Serenity Towers project and participating in the Shared Appreciation Mortgage Revenue Bond Program. The sponsor believes that provision of low-cost rental housing (as presently proposed with Serenity Towers) and low-cost mortgage funds (through contribution to the Mortgage Revenue Bond Program) would be more consistent with stated City goals to increase the supply of housing, and primarily the inadequate supply of low-cost housing, than constructing market-rate housing on-site.

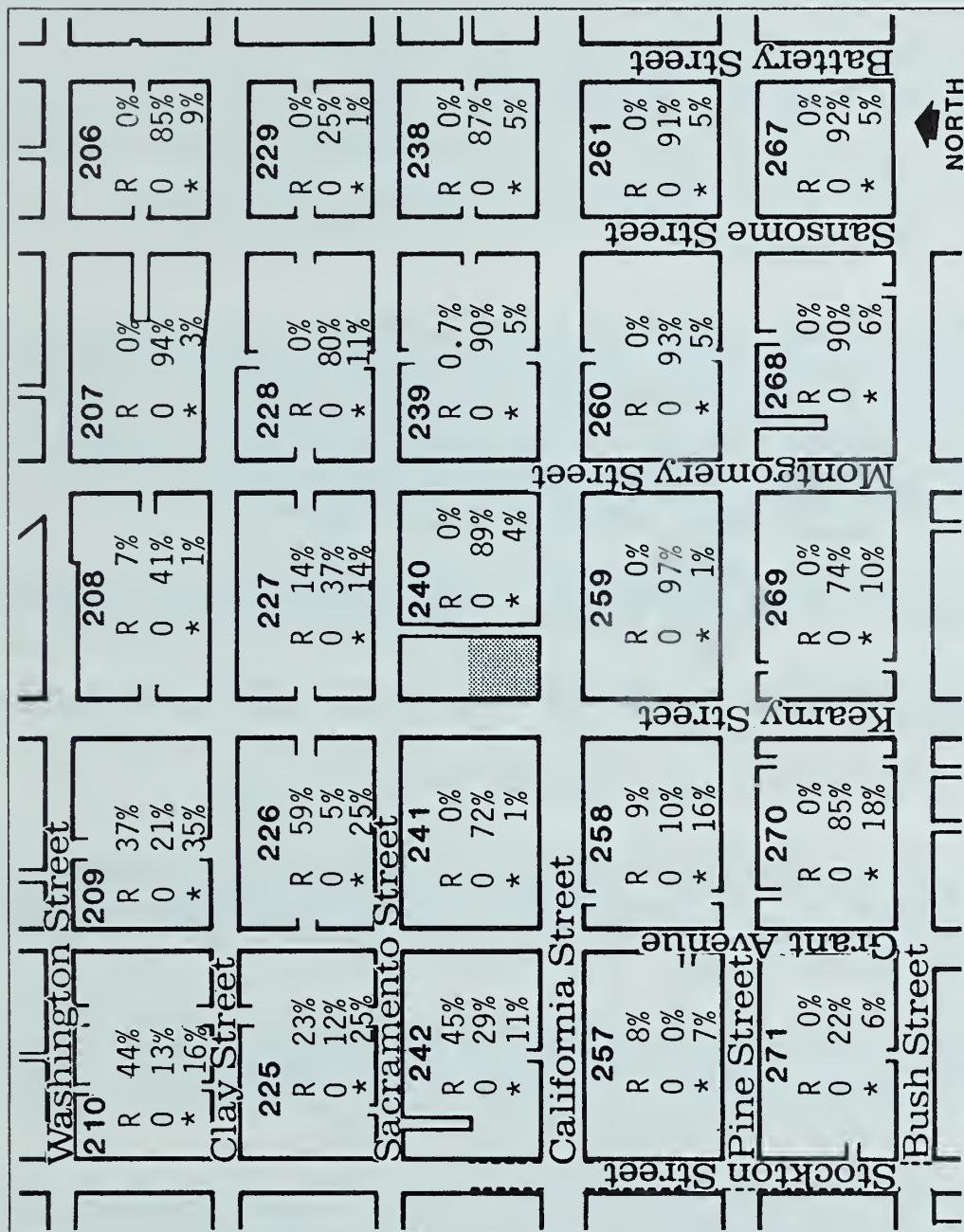
Open space is located at Portsmouth Sq., the Bank of America Plaza and Redwood Park Plaza. Portsmouth Sq. is within Chinatown (Figure 17, p. 51 of the EIR shows a view of the site from Kearny St. fronting Portsmouth Sq.). The Department of City Planning has acknowledged that the Chinatown area is one of the highest priorities for additional open space (DCP, Open Space and Recreation Program Element, July 1973, p. 67), but acquisition of the site for open space is not a part of any City policy or program. The existing building on the site currently contains no public open space, and the City Planning Code does not require the provision of open space in office buildings.

The development of open space on the site in addition to the arcade is discussed under Alternatives B and C, pp. 108-116, of the EIR. These alternatives have been rejected by the project sponsor.

For a description of the proposed arcade, see the response under the subheading "Arcade" of the Urban Design section, p. 145 of this document. The arcade would serve primarily to define the entrance of the building and provide pedestrian scale, and would not contain landscaping or benches or tables for recreational purposes. The arcade would result in widening of the sidewalk and would increase the sense of openness at the pedestrian level on the project site.

For a discussion of air quality in the project vicinity, see the response to the comment under the subheading "Location of Measurements" of the Air Quality section, p. 196 of this document.

For additional discussion of Chinatown, see the response under "Growth Inducement" on p. 202 of this document.



210 Block Number

Site

R Residential (totals for project block
do not include project)

O Office (including banks)

* Retail

SOURCE: Environmental Science Associates, Inc.

**FIGURE A: Residential, Office and Retail Uses
in the Two-Block Radius Surrounding
the Project Site
(Percent of Total Developed Area
Per Block)**

CUMULATIVE DOWNTOWN DEVELOPMENT LIST

COMMENT

"The project lists ... which are referenced on p. 25 and are in the appendix, are missing all of the redevelopment projects in A-1 and A-2. I attached a list of those projects in my comments ... that your staff already picked up. I find it astounding that you to this day do not have the Wealth Investments Building on Sutter and Franklin, nor do you have One Flynn Center, nor do you have other projects that the Redevelopment Agency -- I mean, you physically can go out of this building and go up to Van Ness and look at the buildings under construction. You don't have the building that is proposed at Post and Kearny, which is active. I mean, it's almost approved by the Redevelopment Agency, it certainly is a project that's under review by the Redevelopment Agency. And, you know, you wait until there is an LDA -- well, there is an LDA on the two that are under construction, folks, and that project should be in this list.

"[I]n this list at the very least, or in approved projects, please add in all project/uses approved in redevelopment plans for Western Addition I & II, Yerba Buena outside central blocks, Rincon Point/South Beach, because Planning has already signed off on them and will have no control regarding approval. They must be considered in the pipeline since they have already been approved as part of city policy by Supes, DCP/CPC and Redevelopment. Also any further possibilities in Golden Gateway and other redevelopment areas. ... Please provide square feet for each project.

"Kaiser Center EIR, EE81.71, City of Oakland. ... Cumulative impact analysis includes approved and proposed projects. ... Note the inclusion of retail and hotel space... .

"Transpacific Centre EIR - EE81.78 - City of Oakland. Similar to Kaiser Center EIR in terms of issues and information.

"I have provided a list of projects that I think are active, with EE numbers.

"It is not okay to drop retail space, since by terms of your own traffic analysis retail space generates more trip ends than office space, and there are consistent findings on pedestrian and vehicular traffic, transit and formerly air quality, which are all related to the amount of persons travelling to the site.

"It is not okay to drop hotel space - change the factors if you think it necessary, but they do not have a zero impact on pedestrian and vehicular traffic, etc. - and since they all generate employment, on housing demand. ... Do the relevant calculations, but don't eliminate the projects totally from lists of cumulative development.

"It is also not okay to drop projects like Executive Park from the analysis. If the employment patterns follow San Francisco/commuter mix, there will clearly be all of the traffic/transit related impacts although the location may be modified. Unless you have specific information for a project outside the CBD to show that it has NO impacts on traffic, transit, etc., you cannot zero it out when all of the EIR resolutions are making findings of cumulative impact.

"My comments on 135 Main did not include the full amount of development now planned for Mission Bay. According to their released plan, the amount of office space is 18.4 million sq. ft. and 500,000 sq. ft. of retail/light industry, and 7,000 dwellings. Please add

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that development into your cumulative impact analysis, especially transit, traffic and air quality. My figures on the amount of cumulative development are now 55 million sq. ft. of under construction, approved or proposed commercial development. Please tell what the impacts of that amount of development will be, especially on the ability to move people into, around and out of San Francisco." (Sue Hestor)

RESPONSE

The list of buildings submitted by the commentator and referred to in the comment are included following p. 89 of this document. The developments referred to in the response are based on those in that list.

Of the developments requested to be included in the cumulative analysis, many are already on the list and most are not appropriate to include in a cumulative analysis of downtown projects.

The following developments are already included on the list of developments used for cumulative analysis: 291 10th St.; 195 Berry (also called China Basin Building and approved for 196,000 sq. ft. of office space); the Gift Mart (listed under the name "Convention Plaza"); Welsh Commons; Golden Gateway III; and 690 Second at Townsend. Several other projects have not filed applications and are therefore not appropriate to consider in the foreseeable future. These are: 1066 Grant, Trinity Plaza, Hills Brothers and 1670 Pine. General possibilities, including housing or a shopping center or office space, with and without parking, have been described in newspaper articles about Trinity Plaza at 8th and Market Sts., but no application of any kind has been filed for this site.

Several developments requested to be added were approved a few years ago and have since been completed: Holiday Inn Fisherman's Wharf, 1625 Van Ness and 483 Third St. They are part of the base case and would be double-counted if included in the cumulative analyses.

The cumulative development analysis has considered 0.5 million gross sq. ft. of retail space proposed to be built in conjunction with office buildings as shown in Table B-3 on p. 250. The analysis did not consider any free-standing retail space such as Neiman-Marcus, which is the only under construction, approved or under review free-standing retail space in the study area (for a discussion of the effects of inclusion of Neiman-Marcus in the analysis of cumulative development, see the response to the comment under the subheading "Projects Included in the Cumulative Analysis" under the heading Transportation, p. 174 of this document).

The following proposals are hotel or residential uses: Olympic Club Hotel, 790 Van Ness, 990 Columbus, Grosvenor Townhouse, Stockton/O'Farrell, Hilton Tower No. 2, Holiday Inn, Holiday Inn-Civic Center, Hotel Ramada and Meridien Hotel. Hotel developments have not been included in the list because they have different employment, fiscal, service and transportation effects than does office development (see also the response to the comment under the subheading "Projects Included in the Cumulative Analysis" under the heading Transportation, p. 174 of this document).

Projects proposed at 650 Seventh, 870 Brannan, 15th and Vermont, 101 Utah (Wholesale Mart addition), and 963 Pacific (1,200 sq. ft.) are all non-office uses, such as wholesale showrooms, which have fewer employees per sq. ft. and different transportation effects than office uses. Therefore, they do not contribute significantly to cumulative effects.

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The following proposals appear to be inactive and therefore have not been included: Fox Plaza addition (inactive since 1980), 301 Mission (inactive since mid-1981), and 99 Oak (inactive since late 1981). Three others, 275 Steuart, 199 New Montgomery, and the Warfield Hotel no longer have building permit applications pending as sponsors withdrew the applications (that for 275 Steuart was withdrawn nearly two years ago).

Negotiations are under way between the General Services Administration and the San Francisco Redevelopment Agency for a site for a federal office building in Yerba Buena Center. If a building program were authorized by Congress in fiscal 1983, plans would be developed. Construction would be completed and occupancy would follow in the early 1990's. Funds for construction of a State building in San Francisco were requested but not included in the State budget for fiscal 1982-83. Construction and occupancy dates are unknown.

Western Addition Redevelopment Areas A-1 and A-2 are located in the Geary and Van Ness corridors and are largely developed. These areas contain primarily residential uses, as well as community facilities and some retail uses. Only one office building, One Flynn Center with 25,000 sq. ft. of office space currently under construction in area A-2, has a Land Disposition Agreement (LDA). See the response to the comment under the subheading "Projects Included in the Cumulative Analysis" under the heading Transportation, p. 174 of this document for a discussion of what effect addition of this area would have on the cumulative transportation analysis.

The Redevelopment Agency is not proposing a building at Post and Kearny. The development known as Post and Kearny, also known as San Francisco Federal Savings, is included in the list of cumulative developments evaluated in the Draft EIR.

The cumulative list does contain those office buildings in the Yerba Buena Center Redevelopment Area which are under construction or for which LDAs have been approved and which have definitely identified floor area figures. The projects included are the National Maritime Union, Block 3751, 80,000 sq. ft.; Office Building, SB-1, Block 3752, 11,000 sq. ft.; Yerba Buena West, Block 3724, 335,000 sq. ft.; and Convention Plaza, Block 3735, 339,000 sq. ft.

Actions by the City Planning Commission approving Redevelopment Area Plans constitute approval of a general plan with a range of permitted uses and floor areas but without precise floor area figures for each parcel. These are determined by the Redevelopment Agency in negotiations with accepted developers. Thus negotiations are presently under way with a developer for the central blocks of Yerba Buena Center. Unless and until the negotiations are completed and a LDA is approved, there are no floor area figures, by type of use, for those blocks that would be comparable with those included in the list used in the cumulative analysis.

Although a maximum limit on development has been established in each redevelopment area, there is not enough information about proposals which have not obtained an LDA to provide reasonably accurate calculations of cumulative impacts comparable to those based on the cumulative project list. If the maximum amount of office space permitted by the YBC plan were included, however, the cumulative total for projects under review would be increased by 1.9 million sq. ft., or 11%. It should be noted that the maximum floor area permitted in a redevelopment area by an approved Redevelopment Plan, like the maximum floor area allowed in a zoning district by a zoning ordinance is seldom, if ever, attained. It would be unreasonable

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to suggest that all the potential floor area permitted by commercial zoning districts in San Francisco be counted in the cumulative list for analysis in a single-project EIR.

The Yerba Buena Center Redevelopment Area (YBC) has been the subject of environmental review since 1973. In 1978 an EIR was certified covering four distinct development alternatives with variants and one tentative proposal for the 86-acre YBC area. In 1981, a Supplement to the 1978 EIR was certified pertaining to a development program for the block fronting on Market St., which had not been covered in the 1978 FEIR. In May 1982, a Second Draft Supplement (82.35E) to the EIR was published which presents an additional development alternative for the entire YBC area and four one-block variants. A public hearing on the DEIR was held in July. This Second Supplement is expected to be considered by the City Planning Commission and Redevelopment Agency Commission for certification in January, 1983.

As noted, those parcels within YBC that have buildings under construction or approved LDAs are already included in the transportation and other cumulative analyses in the EIR. The disposition of all other vacant parcels and lots on which buildings are located that are not slated for preservation is under the control of the Redevelopment Agency Commission. The Agency Commission could elect to approve any of the uses that have received environmental review in the 1978 FEIR and two Supplements (after certification of the Second Supplement), or which may receive environmental review in the future. To precisely state particular uses and amounts of floor areas for YBC parcels for which specific plans have not been approved would give a false impression of knowledge or accuracy and could be misleading.

The development potential for the Mission Bay and Rincon Hill areas is presently in preliminary stages of planning. At least six alternatives are under consideration for Mission Bay. A planning and feasibility study is being made for Rincon Hill. No project approvals have been applied for; the amount and type of development has not been established for either area.

An EIR has been prepared for the Rincon Point - South Beach Redevelopment Area (Rincon Point - South Beach Redevelopment Area, San Francisco, California, Final Environmental Impact Report/Environmental Impact Statement, San Francisco Department of City Planning, certified November 5, 1980). However, no LDAs have been issued for parcels in the area. This is discussed on p. 134 of the Draft EIR, the 3rd para. of notes in Table B-3. The EIR states, "Until such time as specific LDAs are approved, no estimate of travel demand can be made (thus, parcels for which no LDA exists have not been included in the cumulative analyses)."

The cumulative study area selected was based partially upon the transportation facilities serving downtown and partially upon topographic constraints. The following projects are not located in the greater downtown area which is the basis for the cumulative analysis: San Francisco Executive Park, Mission & Russia, 350 Beach, 1734 Union, 1969 Union, 2318 Fillmore, 395 Hayes, 1975 Market, Francisco Place, 1099 Sixteenth St., 1735 Franklin, 1581 Bush and 644 Broadway.

Many projects are in very early stages of review by City agencies: Pine/Kearny Office Building, Union Square West (now called Block 331), 5th and Market, 505 Montgomery, 562 Mission (now called One Anthony Ct.), 1171 Sansome, 101 Hayes and 1601 Van Ness. These projects often change size or even uses proposed in these

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early stages or are withdrawn. Some have filed for review by the Department of City Planning but have not filed formal requests for approval.

For example, the Pine/Kearny project was first proposed as a hotel; the Block 331 project originally included several hundred new dwelling units, and the 562 Mission St. (One Anthony Ct.) project has changed ownership two times since the original filing, resulting in substantial changes to the design. These projects are therefore considered too indefinite to include until plans are better defined.

The Cumulative Office and Retail Development list, Table B-2, p. 247 of the Draft EIR, if updated to November 25, 1982, would include the following additional projects: AB 3717, 123 Mission, 342,800 sq. ft.; AB 3750, Second and Harrison, 228,000 sq. ft.; AB 3735, Planter's Hotel conversion, 20,000 sq. ft.; AB 738, One Flynn Center, 25,000 sq. ft.; AB 768, Franklin and McAllister, 53,600 sq. ft.; AB 671, Wealth Investments, 104,500 sq. ft.; AB 3750, 642 Harrison, 45,900 sq. ft.; AB 3794, 155 Townsend, 19,000 sq. ft.; AB 143, 1000 Montgomery, 39,000 sq. ft.; AB 141, 100 Broadway, 13,000 sq. ft.; AB 176, 900 Kearny, 25,000 sq. ft.; AB 110, Embarcadero Terraces, 142,000 sq. ft.; AB 3763, 400 2nd at Harrison, 49,500 sq. ft.; AB 3788, 640 2nd St., 37,400 sq. ft.; and AB 3504, 44 Gough, 30,000 sq. ft. The 1049 Market (108,000 sq. ft.) and Greyhound Bus Terminal (100,000 sq. ft.) proposals would be removed. Both have been withdrawn from consideration by their sponsors. In addition, the square footage analyzed for the Ferry Building in the list used in the Draft EIR was high and should be reduced by 173,000 sq. ft. of office space and 15,000 sq. ft. of retail space.

Most of these revisions have occurred since the DEIR was printed. If the totals were adjusted to make these changes, net new office square footage would increase by about 0.7 million and retail square footage would remain about the same. As the analysis methodologies are accurate only to $\pm 10-15\%$, a change of 0.7 million gross sq. ft. (4%) would not change the results presented in the EIR.

The floor areas, both net and gross, of the developments considered in the cumulative analysis presented on p. 247 of the Draft EIR in Table B-2, are shown in Table A, p. 134 of this document.

The transportation analysis focused on the downtown street and transit system including the freeway access ramps. Developments within the cumulative study area were assumed to add travel in the peak direction (heaviest demand direction) on the downtown street and transit system. Locations such as Executive Park or the Bayshore Freeway corridor in San Mateo County would not have a similar effect. Effects of cumulative regional development are discussed qualitatively in the response to the comment under the subheading "Regional Office Market and Effects", pp. 38-43 in the Employment, Housing and Fiscal Factors section, and on pp. 57-61, under the subheading "Impacts of Cumulative Development in the Transportation section."

The analyses in the Kaiser Center and Transpacific Centre EIRs are similar to the analysis used in this EIR in that only development in the project area is analyzed. In this EIR downtown San Francisco development is treated as cumulative and in the Oakland EIRs Oakland Central District development in that area is similarly treated as cumulative. For a discussion of regional development, see p. 158 of this document, under the subheading "Regional Office Market and Effects" and p. 177, under the subheading "Impacts of Cumulative Development."

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TABLE A: DOWNTOWN OFFICE PROJECTS CONSIDERED IN THE CUMULATIVE ANALYSES, WITH FLOOR AREAS

<u>Downtown Office Projects Under Formal Review</u>						
<u>Block</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Office (Gross Sq. Ft.) New Construction</u>		<u>Retail (Gross Sq. Ft.) New Construction</u>	
			<u>Total</u>	<u>Net New</u>	<u>Total</u>	<u>Net New</u>
58	82.234ED	Roundhouse	45,000	45,000	0	0
112	81.258	Ice House Conversion (C)	209,000	209,000	0	0
136	81.245	955 Front at Green	50,000	50,000	0	0
176	81.673EACV	Columbus/Pacific Savoy	49,000	49,000	22,000	22,000
228	81.610ED	569 Sacramento (C)	19,000	19,000	0	0
240	81.705ED	580 California/Kearny	329,500	260,000	6,500	6,500
265	81.195ED	388 Market at Pine	234,500	80,500	10,000	-8,500
269	81.132ED	Russ Tower Addition	405,900	405,900	0	0
270	81.175ED	466 Bush	86,700	86,700	7,800	2,200
288	81.461ED	333 Bush (Campeau)	498,400	458,100	20,900	20,900
288	81.687ED	222 Kearny/Sutter	269,400	202,400	10,000	-8,400
669	81.667ED	1361 Bush (C)	45,720	45,720	0	0
716	81.581ED	Polk/O'Farrell	61,600	61,600	22,400	22,400
3702	81.549ED	1145 Market	137,000	65,000	8,000	8,000
3703	81.494ED	1041-49 Market	108,800	108,800	43,000	30,100
3707	81.492ED	90 New Montgomery	124,300	124,300	3,350	3,350
3707	81.245C	New Montgomery Pl.	238,200	222,100	0	-6,100
3708	81.493ED	71 Stevenson	324,600	324,600	6,200	6,200
3733	82.29E	832 Folsom	50,000	50,000	0	0
3760	81.386	401 6th	7,000	7,000	0	0
3776	81.59	Welsh Commons	55,600	55,600	12,000	12,000
3778	81.630ED	548 5th/Brannan	250,000	250,000	0	0
3891	82.99E	Greyhound Bus Terminal	100,000	100,000	0	0
3786	82.33E	655 5th/Townsend	126,250	126,250	0	0
3789	82.31EV	615 2nd/Brannan (C)	106,000	106,000	0	0
9900	81.63	Ferry Building Rehab	115,000	115,000	110,000	110,000
		-Pier One Development	127,000	127,000	15,000	15,000
		-Agriculture Building	27,000	27,000	14,000	14,000
TOTAL			4,200,470	3,781,570	311,150	249,650
<u>Approved Downtown Office Projects</u>						
106	81.415ED	1299 Sansome	41,000	41,000	3,500	3,500
161	80.191	Mirawa Center	36,000	36,000	30,650	30,650
164	81.631D	847 Sansome	23,750	23,750	0	0
164	81.573D	50 Osgood Place	22,500	22,500	9,100	9,100
166	CU81.7	222 Pacific at Front(C)	142,000	142,000	0	0

TABLE A: (continued - page 2)

Approved Downtown Office Projects (continued)						
Block	Case No.	Project Name	Office (Gross Sq. Ft.)		Retail (Gross Sq. Ft.)	
			New Construction Total	Net New	New Construction Total	Net New
166	80.15	750 Battery	105,400	105,400	12,800	12,800
206	81.165D	401 Washington/Battery	13,200	13,200	1,800	1,800
227	80.296	Bank of Canton	230,500	177,500	0	-800
261	81.249ECQ	333 California	640,000	466,500	15,500	15,500
262	81.206D	130 Battery	41,000	41,000	0	0
267	81.241D	160 Sansome	2,200	2,200	0	0
268	81.422D	250 Montgomery at Pine	105,700	65,700	8,000	8,000
271	81.517	453 Grant	27,500	27,500	6,200	6,200
271		582 Bush	18,900	18,900	0	0
294	82.870	44 Campton Place	7,600	7,600	0	0
311	82.120D	S.F. Federal	246,800	218,850	1,600	-9,440
351	DR79.24	Mardikian/1170-72 Market	40,000	40,000	0	0
3512	82.14	Van Ness Plaza	170,000	170,000	6,000	6,000
3518	81.483V	291 10th St.	25,700	25,700	0	-25,700
3705	80.315	Pacific III Apparel Mart	332,400	332,400	0	0
3709	81.113ED	Central Plaza	353,100	136,300	17,400	17,400
3715	82.16EC	121 Steuart	33,200	33,200	0	0
3717	80.349	Spear/Main (160 Spear)	279,000	279,000	7,600	7,600
3717	82.82D	135 Main	260,000	260,000	4,000	4,000
3722	81.417ED	144 Second at Minna	30,000	30,000	0	0
3724	81.102E	Holland Ct. (C)	27,850	27,850	0	0
3729	82.860	774 Tehama	5,800	5,800	0	0
3732	81.548DE	466 Clementina (C)	15,150	15,150	0	0
3733	81.2	868 Folsom	65,000	65,000	0	0
3735	80.106	95 Hawthorne (C)	61,900	61,900	0	0
3738	DR85	315 Howard	294,000	294,000	3,200	3,200
3741	82.203C	201 Spear	229,000	229,000	5,200	5,200
3749	81.18	Marathon - 2nd & Folsom	681,700	681,700	39,300	39,300
3751	77-220	National Maritime Union	80,000	80,000	0	0
3752	77-220	Office Bldg. (YBC SB-1)	11,000	11,000	0	0
3763	81.287V	490 2nd at Bryant (C)	40,000	40,000	0	0
3763	81.381	480 2nd at Stillman (C)	35,000	35,000	0	0
3775	81.147V	338-340 Brannan (C)	36,000	36,000	0	0
3776	81.693EV	539 Bryant/Zoe	63,000	63,000	0	0
3787	81.306	252 Townsend at Lusk	81,900	81,900	0	0
3788	81.296Z	690 2nd/Townsend (C)	16,600	16,600	16,000	16,000
3789	81.552EV	625 2nd/Townsend (C)	157,000	157,000	0	0
3794	81.569EV	123 Townsend	104,000	49,500	0	0
3803	81.244D	China Basin Expansion	196,000	196,000	0	0
TOTAL			5,428,350	4,862,600	187,850	150,310

VIII. Summary of Comments and Responses

TABLE A: (continued - page 3)

<u>Downtown Office Projects Under Construction</u>						
<u>Block</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Office (Gross Sq. Ft.)</u>		<u>Retail (Gross Sq. Ft.)</u>	
			<u>New Construction Total</u>	<u>Net New</u>	<u>New Construction Total</u>	<u>Net New</u>
163	81.1	901 Montgomery	63,000	63,000	18,800	18,800
164	81.251D	936 Montgomery-(disco)	21,500	11,500	0	0
167		Golden Gateway III	103,000	103,000	0	0
196		736 Montgomery	40,000	40,000	0	0
196	CU79.49	Pacific Lumber Co.	92,000	92,000	0	0
208	81.104EDC	Washington/Montgomery	235,000	233,300	4,000	-1,200
237	DR80.6	353 Sacramento (Daon)	277,000	251,000	8,300	-2,000
239	DR80.1	456 Montgomery	160,550	160,550	24,250	24,250
240	DR80.16	550 Kearny	71,400	71,400	0	0
263	CU79.12	101 California	1,265,000	1,257,000	24,700	-14,300
287	81.550D	Sloane Building (C)	125,300	125,300	30,000	30,000
288	DR80.24	101 Montgomery	264,000	234,000	5,900	-14,100
289	81.308D	One Sansome	603,000	603,000	7,000	7,000
292	DR79.13	Crocker National Bank	676,000	495,000	86,000	54,000
312	79.370	50 Grant	90,000	90,000	0	0
351	79.133	U.N. Plaza	92,050	92,050	0	0
762		Opera Plaza	50,000	50,000	0	0
3702	81.25	1155 Market/8th	138,700	138,700	8,800	8,800
3708	80.34	25 Jessie/Ecker Square	111,000	111,000	0	0
3709	80.36	Five Fremont Center	791,200	722,200	35,000	17,300
3712	79.11	Federal Reserve Bank	640,000	640,000	0	0
3715		141 Steuart	80,000	80,000	0	0
3717	79.236	101 Mission at Spear	219,350	219,350	0	0
3717		150 Spear	330,000	330,000	0	0
3718	79.12	Pacific Gateway	540,000	540,000	7,500	7,500
3724		Yerba Buena West	335,000	335,000	0	0
		Convention Plaza	339,000	339,000	0	0
TOTAL			7,753,050	7,427,350	260,250	136,050
GRAND TOTAL			17,381,870	16,071,520	763,750	536,010

SOURCE: Department of City Planning, August 6, 1982

ZONING

TRANSFER OF BASIC PERMITTED FLOOR AREA

COMMENT

"On p. 44 I notice that there is this enormous transfer of development rights issue going on on this project, and they are considering a project with TDR on land that they don't own yet. I'm wondering what kind of EIRs we put out when we're talking about a project that they have no entitlement to, and which is the base case for the entire EIR analysis. If they own the land, there's no record of it in this EIR. Maybe there is some in some news release that I haven't seen.

"... What kind of games are we getting into with transfer of development rights? We see them on 333 Bush St., we see them on this building. I have real questions about the environmental impact, the planning utility, and the social utility of encouraging the most dense buildings in the City adjacent to property that is not threatened, under the guise of TDRs. What is the underlying planning policy for TDRs?

"I don't think it is that there should be the maximum height buildings everywhere. Should there be a requirement when they come in with the EIR that they have the project all under one ownership? I think that is a basic requirement. So you have a very warped perspective, and this is going to be one of the most dense buildings downtown that is in this EIR.

"Please tell me in planning policy terms why that should be allowed, why you should encourage this developer to go up higher, and why you should, therefore, maximize the environmental impact. Because environmental impacts are definitely related to the amount of sq. ft. and the number of people here, especially the three that you still admit to, which is pedestrian and vehicular traffic and transit. A number of people are really involved in that.

"Please justify any need for tdr. ... If [the adjacent buildings are not threatened], why should the adverse environmental impacts be increased by allowing additional FAR on this project? Please explain environmental benefit flowing from that approach." (Sue Hestor)

"P. 13 states that the FAR of the proposed building will be 21.3:1 because of transferred development rights from adjacent properties. I am under the understanding that only when a historical landmark is permanently preserved as part of a development project can that project take credit by being granted an increased FAR. I believe the FAR should be limited to 14:1 since the EIR does not state that any historical landmark will be preserved. The Final EIR should state the reasons why this building should be limited to a 14:1 FAR." (David Jones)

"[T]he EIR fails to adequately document how the excess floor area from adjacent buildings was calculated. The EIR gives no basis for size and excess of FAR determination and is patently deficient in this respect. In addition, the transfer of development rights from a distance exceeding 25 ft. violates the City Planning Code." (San Franciscans for Reasonable Growth)

RESPONSE

The sponsor has a purchase agreement with the current owners of the Fireman's Fund site, and has executed agreements to purchase air rights with the owners of the lots from which undeveloped permitted floor area would be transferred.

The environmental impacts of buildings incorporating area transferred from other building sites are presented in the environmental impact documents prepared for such buildings. Transfer of developable area is allowed as a matter of right under the City Planning Code. Such transfer does not result in an increase of developable area over the involved sites, only a redistribution, so that an increase in density on the transferor lot is matched by less available density on the transferee lot. The allowable basic FAR on the transferor lot is permanently reduced by the transfer of floor area. While the EIR addresses the environmental effects of a building incorporating transferred area, it is beyond the scope of the document to address the policy intent underlying Section 127(a) of the Planning Code. Comments on the policy must be directed to City agencies responsible for the content of the City Planning Code.

Transfer of permitted basic floor area, also called transfer of development rights (TDR) is allowed under Section 127(a) of the Planning Code, "Transfer of Permitted Basic Gross Floor Area." This section states:

The maximum permitted gross floor area for any building or development on a lot in the C-3-O district, to the exclusion of all other districts, may be increased by transfer to such lot of basic gross floor area that is permitted under Section 124 of this Code but unbuilt upon an adjacent lot; provided, that the aggregate of all such transfers from any one adjacent lot to all other lots shall be no more than one-half the basic gross floor area that would be permitted on said adjacent lot. ... For the purposes of this section, an adjacent lot is one which either abuts for a distance not less than 25 feet along a side or rear lot line of the lot to which the basic gross floor area transfer is made (hereinafter referred to as the transferee lot), or would so abut for such a distance if not separated solely by an alley.

Required documentation and limitations on the allowable transfer are detailed in subsections (c), (d) and (e) of Section 127. Section 127(b) deals with transfer of floor area when a landmark building is involved; transfer of area is not limited to situations involving landmark buildings. As noted on p. 44 of the EIR, the transfer of floor area does not change the development potential on the project block nor does it involve any discretionary action by the City. Transfer of floor area is as of right under the Planning Code and is not subject to approval or denial by the City Planning Commission as long as the requirements of Section 127 are met.

The environmental effects of a design without transfer of basic floor area are discussed in Alternative One, pp. 105-107 of the EIR. The alternative design has an FAR of 14:1, which may be approved by the City Planning Commission over the sponsor's preferred project proposed in the EIR.

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Floor area calculations for transfer of basic permitted area have been reviewed by the Zoning Administrator of the Department of City Planning and the City Attorney's Office. The calculations of the transferee lots are as follows:

Lot 16:	Permitted FAR:	14:1	
	Lot size:	18,735.1 sq. ft.	
	Permitted basic area:	262,291.4	
	Developed area:	<u>193,139.78</u>	
	Undeveloped area:		69,151.62 sq. ft.
	Proposed for transfer:		69,109 sq. ft.

Lot 18:	Permitted FAR:	14:1	
	Lot size:	35,062 sq. ft.	
	Permitted basic area:	490,868	
	Developed area:	<u>400,621</u>	
	Undeveloped area:		<u>90,247</u> sq. ft.
	Proposed for transfer:		<u>47,000</u> sq. ft.

Total area available for transfer:	159,398.62 sq. ft.
Total area proposed for transfer:	116,109 sq. ft.

Transfer of development rights is not limited to a distance of 25 ft. Section 127(a) states that the adjacent lot from which area is transferred (transferee lot) must abut the lot to which area is transferred (transferor lot) for at least 25 ft., or would abut except for the presence of an alley. The 580 California St. project site abuts both transferee lots for a minimum distance of 124 ft. Spring St., across which area would be transferred to the site from 550 California St., is an alley as defined in the Code.

LOADING AND PARKING PLAN; PLANNING CODE REQUIREMENTS AND RESOLUTION 9286

COMMENT

"It should be noted that the loading dock dimensions exceed the requirements of Section 154 of the City Planning Code, and the loading and parking plan do not conform to the requirements of Resolution No. 9286. The design provides for three 35 ft. by 12 ft. stalls accessible from Spring St." (San Franciscans for Reasonable Growth)

RESPONSE

The project's loading dock dimensions exceed the requirements of Section 154 of the City Planning Code and, as discussed on p. 83 of the EIR, the project complies with the number of loading spaces required by Section 154. The dimensions and number of loading spaces provided in the project would conform to the more stringent recommendations of City Planning Commission Resolution 9286 (three spaces, each 35 ft. deep and 12 ft. wide). The dimensions of proposed curb cuts would exceed the recommendations contained in the resolution (see p. 83, 2nd para. of the EIR). Resolution 9286 is an expression of policy; it has not been formally adopted as a part of the Planning Code.

RELATIONSHIP OF THE PROJECT TO GUIDING DOWNTOWN DEVELOPMENT

COMMENT

"The draft EIR does not adequately explain why the proposed project does not comply with Guiding Downtown Development (GDD). In May 1981, the Department of City Planning published GDD which contains regulatory proposals for downtown San Francisco development. Although the City Planning Commission has not voted on adoption of GDD, the document contains important policy guidelines -- so important that the Planning Commission requires that EIRs for developments in the downtown area must include an alternative complying with GDD.

"The proposed project substantially is at variance with GDD. The EIR does not adequately explain why the alternative proposal, which conforms with GDD, was rejected. Significant differences between the project proposal and GDD are the following:

"(a) The proposed project does not conform to 'bulk limitations' which have been recommended to encourage an interesting and attractive city roofline/skyline. (A project complying with GDD guidelines would have 'step-ins' and sloping angles in the roofline area to provide a visual relationship to the adjacent buildings.)

"(b) According to the EIR, the proposed project has an FAR (Floor Area Ratio) of 21.3:1. The recommended GDD FAR is 12:1; GDD guidelines would allow the purchase and transfer of permitted floor area to allow an FAR of 14:1. The proposed project's FAR of 21.3 exceeds this FAR by 7.3.

"(c) The proposed project provides for no open space other than a pedestrian arcade along California St. A proposal designed to comply with GDD would, in addition to the arcade, include a sun view and terraces.

"(d) The proposed project has more office space, and less ground-floor retail space, than would a building designed to comply with GDD.

"(e) The provision of on-site parking directly conflicts with GDD guidelines.

"The developer has rejected the above suggested modifications, primarily because 'it would not maximize the allowable developable area on the site, and, as such, would be an economic underuse of the site.' (Draft EIR, p. 111.) GDD Guidelines were developed, in part, to ensure that aesthetic and open space amenities would not be jettisoned in favor of attainment of the highest possible profit return." (San Franciscans for Reasonable Growth)

RESPONSE

Guiding Downtown Development (GDD) contains suggestions for changes to regulations governing downtown development. Except for the recommended loading specifications, which the City Planning Commission has implemented as a matter of policy (Resolution 9286), none of the recommendations in GDD have been officially adopted, and the project is not required to conform to the recommendations. Alternatives 2 and 3, pp. 108-116 of the EIR, present alternative designs that would conform to GDD, most recently released by the Department of City Planning in July 1982. Table 2, p. 46 of the EIR contains a comparison of the project to provisions of the Planning Code and GDD.

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The 1981 version of GDD contained a provision that recommended limiting the maximum FAR to 17:1 (including on-site housing) in the C-3-O District. This provision is not included in the July 1982 version, which contains no suggested maximum FAR. The July 1982 GDD would not change Section 127(a) of the City Planning Code governing transfer of basic permitted floor area for lots which do not contain landmark structures. It suggests reducing the FAR for calculation of basic permitted floor area from 14:1 to 12:1 (both for the project and for the calculation of transferable area), but GDD contains no provision limiting transfer of area to an FAR of 2:1. Should sufficient undeveloped area be available for transfer from a lot, a building could contain an FAR of 21.3:1 and still conform to GDD. (See Alternatives 2 and 3, pp. 108-116, of the EIR, for examples of buildings on the project site which would conform to provisions in GDD.)

GDD contains nine different options for satisfying the recommended open space requirement; sun and view terraces are only two of the available options. The existing Planning Code does not require the provision of open space for office buildings (see Table 2, p. 46 of the EIR); the arcade is proposed as part of the project design. Under GDD, it would provide about 1,800 sq. ft. of the recommended open space requirement of about 13,600 sq. ft.

GDD would not require ground-floor retail space, and would not automatically result in more retail space than proposed in the project. All of the ground floor space in the project not required for lobby, loading or open space area is proposed for retail use (see Figure 5, p. 12, of the EIR).

In addition to rejecting GDD alternatives as economic underuses of the site, the sponsor has rejected them because the project already addresses the recommendations in GDD in several ways. The number and dimensions of loading spaces proposed would conform with the recommendations of Resolution 9286; dimensions of proposed curb cuts would not. The roof of the project would have sloping sides and would be ornamented, providing visual interest. The architectural detailing of the building's facade would reduce the appearance of bulk. The two-story arcade along the California St. entrance would provide pedestrian scale. Retail uses are proposed on the ground floor and clear glass in the first- and second-story windows would provide a sense of activity for pedestrians.

The provisions of GDD are expressions of suggested policies which may or may not be formally adopted, but have not been formally adopted at this time and are not binding requirements.

URBAN DESIGN

ARCHITECTURE OF THE PROJECT

COMMENT

"I am writing to comment upon the "Urban Design" of the proposed office building for 580 California St. Specifically, I am writing to state that I do not feel that the Johnson/Burgee firm has succeeded in their attempt to integrate certain architectural elements from earlier periods with the modern building they are proposing. The mansard roof, with the ornamental cast iron trim and the several statuary on each side, is totally out of harmony with the architectural design of the body and base of the structure. It is

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absurd. The roof might also be characterized as "fussy", particularly in view of the minimal ornamentation or decoration on the building shell. Granted, that the Johnson/Burgee firm is known for occasional absurdity in architecture (witness the AT&T Building in New York), but I do not feel that either their previous excesses or their national reputation justifies the proposed design. I do not suggest that elements from one architectural period should never be mixed with those of another. This has and can be done successfully and it can add design interest and distinction to a structure. I only assert that this particular effort is not successful. It is not integrated; it is not harmonious; it is only a spoof and of shock value. I respectfully suggest that the project sponsor be asked to provide other design alternatives, with the hope that such alternatives will provide a more harmonious whole, be it modern, classical, or a mixture of the two." (Kent E. Soule)

RESPONSE

The commentator is expressing a personal opinion on the design of the project. The sponsor, Gerald D. Hines Interests, and the architects, Johnson/Burgee, believe that the building represents a successful blending of classical and modern architecture. The architects offer the following description of the architectural elements and the purpose of elements of the proposed design (Johnson/Burgee Architects, letter, on file at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th Floor):

The site of the proposed 580 California Street building is located on one of San Francisco's most important streets, directly across from Bank of America Plaza. It is, therefore, proposed that the building be built to the property line, maintaining the street wall and containing the open plaza across California Street. Along the California Street frontage an arcade is provided, which forms a strong base for the building and defines the pedestrian precinct. Finely detailed cast aluminum cresting is used along the edge of the arcade, further enhancing the pedestrian scale.

The building [would] be of very light granite to reflect light into the Bank of America Plaza which, being on the north side of the very tall bank building, is now mostly in shadow. The masonry feeling of the building is emphasized by the granite corners with punched windows. The middle bays between the masonry corner towers are rounded bow windows reminiscent of earlier windows in the San Francisco area. The columns separating the bays are also round, reinforcing the sculptural quality of the stone facade.

The building is crowned with a mansard roof of grey glass, which contains two office floors. The mansard is topped with cast aluminum cresting and finials to increase variety and interest at the roof line. Standing in front of the mansard, a sculptural figure tops each of the masonry columns ... and provide[s] an ending to the granite columns, which run the full height of the building.

The architectural design of a project, beyond its address to policies and objectives in the Comprehensive Plan and any other applicable City policies, does not constitute a physical environmental impact under CEQA. A design alternative, based on a subjective evaluation of what would be architecturally successful, would not be relevant to the environmental review of the project. The City Planning Commission will review the design of the building under its Discretionary Review powers.

STATUES

COMMENT

"[W]e're going to go way up high and we're going to look at these statues. And in this EIR there is no description of the statues. So I think the EIR should include measurement of them, some description of what they are, because you can't tell what they are or what their meaning is -- if they have meaning. I guess they mean they are taking those pillars or columns up, but they are left in a very vague state in this EIR. I think particularly we need to know proportion. I would imagine they are going to be 12 to 20 ft. high, but I don't know, and this isn't clear. So could we please have that data? It also says that ... the top of the building won't stand out, or that it won't be significant in the skyline, and I really think that if those statues are up there, they are going to be significant. ... I want discussion of it, because every single person looking out from an office is for sure, if they are looking in that direction, ... going to see them. And I think it's a big question whether they need to. And I think we should at least know what they are going to look like, and pretty clearly, and then discuss where they will be seen from." (Susan Bierman)

RESPONSE

The proposed statues would be draped figures about 12 ft. tall (see Figure B, p. 144 of this document). Muriel Castanis, a New York sculptor, would be commissioned to make the statues. Ms. Castanis produces the figures from an epoxied fabric draped as though around a human form, thus giving a representation of a figure without the actual body.

The figures are intended to stand as capitals to the building's masonry columns and add textural elements at the roof. According to the building's architects, "the figures, while very classical in feeling, are at the same time very modern and in one sense abstract by the absence of the supporting body. The building is also very classical in feeling, that is having a definite bottom, middle and top, and yet obviously very much of our time, while being influenced by historical precedents." Historic references for the integration of sculpture and architecture include the Bernini arcade at St. Peter's in Rome, Palladio's Basilica in Vicenza, the Library of St. Mark in Venice, and others.

The most detailed views of the statues would be from upper stories of tall buildings near the site with windows facing the project, e.g., the Bank of America Tower, the Liu Chong Hing Bank, and the Hartford Building. One or more of the statues would be visible (in less detail because of greater distance) from points along the California St. view corridor (see Figures 15 and 16, pp. 49-50 of the EIR). The statues would be visible from Kearny St. north of the project (see Figure 17, p. 51 of the EIR), as well as from the west side of Kearny St. south of the project past the Liu Chong Hing Bank. In longer range views the statues would be visible, but not in very great detail.

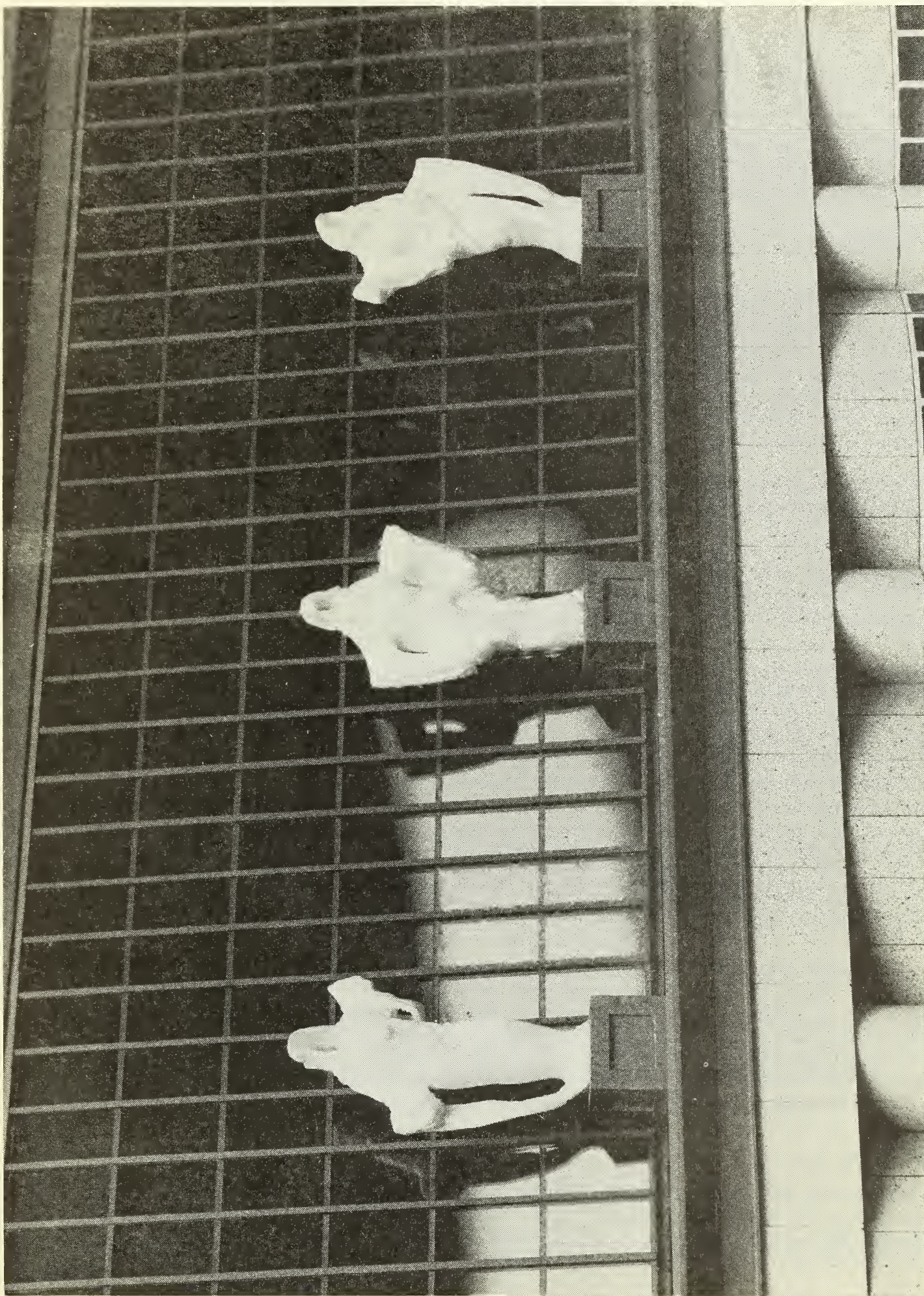


FIGURE B: Photograph of Model Showing Statues

SOURCE: Johnson/Burgee

ARCADE

COMMENT

"P. 48 talks about an arcade, and someplace in this EIR we need to have a better description of that arcade. I didn't understand where the arcade is or what it's going to look like." (Susan Bierman)

RESPONSE

As noted on p. 13, 1st full para., 2nd sentence, "The base would have a two-story pedestrian arcade along California St. intended to provide pedestrian scale". For graphic representations of the design, location and dimensions of the arcade, see Figure 3, p. 10, Figure 5, p. 12, Figure 8, p. 16, and the photomontage in Figure 18, p. 52. The arcade is located between and is accessible through the arches of the end bays at the corners of the building on California St. The approximately 120-ft. long by 15-ft. deep arcade would be open to California St. and is defined by the end bays and three cylindrical columns equidistant from the end bays along California St.

See also the response to the comment under the heading "Chinatown" in the Land Use section, p. 126 of this document.

COLOR OF GLASS

COMMENT

"I have noticed we're going to have gray glass in this building, as they keep saying. Well, most EIRs now reference solar gray glass. There is a lot of solar gray glass around town. For you and me it's black, folks. You go down around lower Market St., look at Shorenstein's projects there, 101 California, all these places that have gray glass. And for the pedestrian person looking around you are in a world of black glass, and then maybe white concrete or whatever that goes with it. This is oppressive. It wasn't bad when it was a new building being set into a context with a lot of older structures from the 30s and 20s and so on, but, of course, now the context is becoming the new buildings. And, you know, it doesn't look any better down at the corner of Drumm and Market than it does in Denver. I can go to Denver if I want to see black glass all over the place. I don't really think that befits San Francisco. I think as a cumulative question you have let that aesthetic question get out of hand.

"They'll call it solar gray, just like they call that brown stuff solar bronze that you see all over the place from 10 years ago when that was popular. Modern technology has developed a lot of different tints of glass that cut energy, even some that are almost clear. They have a lot of options. You don't have to get this stuff any more if you don't want it. I think you really need to take a look at it, and take a look at the aesthetic impact of a lot of that stuff around. This building is a good place to start, and I think you ought to follow through on other structures as well." (John Elberling)

RESPONSE

The windows in the 580 California St. building would not contain reflective or black glass, except in the mansard roof. Solar bronze glass would not be used in the building. The building would have dual-paned windows on the 3rd to 21st floors; the

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outer pane would be tinted grey (non-reflective) and the inner pane would be clear. The dual-pane glass with a tinted outer pane was selected on the basis of energy efficiency and appearance. The tinted glass is not available in any other shade or value. About 30% of the facade at the 3rd to 21st levels would be glass. The first 2 stories on the California St. facade, behind the arcade, would contain both vision (window) and spandrel (wall) glass, equal to about 90% of this portion of the facade. This glass and all windows in the first two stories would be clear glass, and would constitute about 70% of the windowed sides (California and Kearny) of the building at these levels. None of these windows would be treated with a reflective coating.

The mansard roof would have sloping sides of dark glass with a reflective coating. The panes would be relatively narrow (2.5 ft. wide) and separated by wide mullions of non-reflective material. The narrow panes and wide mullions would reduce the actual and perceived expanse of glass, to avoid a "plate glass" appearance. The glass would not be visible in the immediate pedestrian view and would not be highly visible in other pedestrian views because of its sloping sides and the projecting cornice. It was selected on the basis of energy efficiency.

The primary facade material would be light grey granite, not concrete (the granite contains mostly white and black grains with some beige flecks). The granite proposed for the project would be "flame cut", a process which results in the greatest possible lightening of a stone while maintaining a natural (unpolished) finish. Light grey granite is a traditional color and material for many important older buildings in San Francisco (e.g., the Pacific Stock Exchange and several banking temples). The color is intended to conform to the traditional architectural elements of the building and other older buildings of architectural importance in the City.

The glass in the 101 California St. building noted in the comment has a reflective coating and will change value to some extent depending on the location of the sun and the appearance of other buildings around it. The facade of the 101 California St. building also contains a higher percentage of glass than would the project; glass is used for much more of the wall area as well as windows in the 101 California St. building.

The analysis of the project's relationship to policies and objectives in the Urban Design Element of the Comprehensive Plan, and other applicable City policies, as required by CEQA, appears on pp. 47-56 of the EIR. The City Planning Commission will address the design of the project during the Discretionary Review process.

VISIBILITY OF THE PROJECT

"Top of p. 13 (also p. 20, para. 2), there would be a dramatic change in building height and street scale. Acknowledge that please, also a shift towards monolithic building frontage. ... Would [the project] tower over and dominate [adjacent buildings]?" (Sue Hestor)

RESPONSE

On p. 47, the 1st para. under the heading "Urban Design", the EIR states: "The project would result in the demolition of a four-story office building and construction of a 23-story (320-ft. tall) office building with ground-floor retail space. The project would be similar in scale to existing high-rises fronting California St. (see Figures 15 and 16, pp. 49 and 50), replacing a moderate-sized building with a high-rise structure

(see Figure 17, p. 51)." As noted in the EIR (Table 3, p. 54, discussion under item 7), adjacent buildings would be about half the height of the project. Pedestrian scale is limited to about two stories; since the project and the two adjacent buildings would exceed two stories, the project would not have a dominating appearance in the pedestrian level view. As shown in Figure 17, p. 51 of the EIR, the building would stand out above buildings on Kearny St. north of the project site; however, the Bank of America tower would be visible beyond the project.

The project would not be an isolated tall building in the midst of shorter buildings. As the discussion on p. 54 notes, the Bank of America building is 780 ft. tall and the Liu Chong Hing Bank is 325 ft. tall. The Hartford Building is 465 ft. tall. These buildings are in the immediate vicinity of the project site. The project would have the same horizontal dimensions as the existing building on the site.

ARCHITECTURAL AND HISTORIC RESOURCES

COMMENT

"The draft EIR does not address the desirability of maintaining the present building for its historic value. The project site is presently occupied by the four-story brick Fireman's Fund building. This structure is topped by a 120-ft. tall clock tower which is a replica of the clock tower of Independence Hall in Philadelphia. Although the structure did not receive a rating in the survey conducted by the Foundation for San Francisco's Architectural Heritage, it is a building of historic significance and the sponsors of the development should have approached the Foundation for their evaluation of the desirability of preserving the building." (San Franciscans for Reasonable Growth)

"You dropped cultural resources from this EIR totally. Why did you drop it? In reading the Initial Study, it was dropped because when Heritage ranked their buildings; they didn't consider any post-1945 buildings at all. So you, therefore, said, 'It isn't ranked and we don't have to deal with it.' Well, that's a very bizarre approach to a building that's an unusual looking building. I understand there is a dispute, that people don't think that copies of Liberty Hall in Philadelphia are particularly meritorious and worthy of landmark status and worthy of retention, but it's an issue. I mean, how did it become a non-issue, just because Heritage's survey didn't include any post-1945 buildings? That building is very distinctive, and it's not ugly. You know, it's kind of strange. It's Philadelphia-style architecture, which I'm a Pennsylvania native, and I don't think that's particularly offensive.

"But, please justify dropping cultural resources totally, because part of the cultural resources context for that corner is that that building has locked it down to a low-rise brick facade, which is not usual for a downtown office building. I don't even know if that's a highrise, but it has allowed light to that site, and it has allowed a human scale to that site, something that the building to the direct south of that doesn't allow. And so you have dropped cultural resources, because the Bay never went there, and because Heritage didn't rank any building after 1945. And that isn't, I don't think, good enough under the law — this EIR should have some discussion of the context. Even if you want to trash it, talk about it. Because you can't say that's a normal building for downtown. There is definitely some kind of a cultural context on having a replication of Liberty Hall here." (Sue Hestor)

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"I wanted to echo the sentiments of Ms. Hestor with regard to the cultural aspects, whether they exist or not, of the current building at 580 California. I also was disappointed that there was no discussion of this in the EIR, and I know it's hopeless to consider saving a building such as this which didn't qualify for landmark status according to historical or architectural reasons, but I think there is a certain quality that it has which will be lost if a highrise building such as the one proposed is placed there. And I think you ought to take that into the deepest consideration. I feel it's really a great loss, and we have had many of these losses, and we have lost many great landmarks which are much superior to this building. But I still think it's something you ought to deeply consider." (Michael Levin)

"I would like to add that this business about this not being a historic building just because it was built in '48 is absurd. It's the last traditional-style building built in the City. That makes it perhaps the most important of all buildings. It's the only building that gives us a true link with the East Coast. And it's important to a lot of people that live in neo-Colonial houses, like maybe Park Merced, that you people might think are a bunch of trash, but these are houses where people live. Neo-Colonial style started in 1890 and continues to the present, and I don't care whether you think modern architecture is it. There are a lot of people who think Colonial architecture is it. And if you destroy this building, they won't have any reinforcement at all along our great cable car lines.

"... We have been through this kind of thing before. We have lost the Fox Theater. We have lost the City of Paris; two buildings, all of which were savable. And we regret that they [the replacement buildings] will be small. [Grace Davies Hall is] under capacity, the capacity of Fox Theater [was better. Grace Davies Hall is] acoustically infinitely inferior. This [Fireman's Fund Building] is a very important building despite what the Academy says. ... Your [City Planning Commission's] department is to save this building, to save this Fireman's Fund building, the last traditional-style building built in San Francisco. You don't even listen. You had the City of Paris torn down. The Environmental Impact Report never even mentioned the French Colony, never even mentioned the Notre Dame des Victoires.

"... Why don't you make some policies on these and start saving such an important building, which means so much to so many middle-class people in America who own Colonial-style homes built from 1890 to the present. They may not appeal to the Academy, because they are not original Colonial, but they are Colonials. To me they are beautiful, to a lot of people in this room they are beautiful, I'm sure. I mean, why not affirm their case when they are riding along the California St. line? I just don't understand the way these people operate." (Randy Ritchie)

"I want to say that in reading this EIR and in thinking about this project, Sue [Hestor] and Mr. Ritchie have both mentioned this business of the building that they are special, and I have to say that I was disappointed also, not just in the EIR, but in discussions about the building, that such a quick decision has been made that it isn't worth anything. ... I have always really liked that building. And I don't think it's a great work of art, but I think it's special, and I don't think that is reflected here. I think it has been given short shrift. ... I mean, I know they are going to take down that nice tower from the existing building, and there are those who don't think it's a good tower, but I think it is really a neat thing to look at." (Susan Bierman)

"I like the Fireman's Fund Building. I wasn't going to require it as part of the EIR, but it is something informally I would like to ask about. Right now the thought of tearing down that building bothers me a great deal, so I would like to ask them to just look into this." (C. Mackey Salazar)

REPOSE

As a 32-year-old building, the Fireman's Fund Building does not have historic significance. It was not addressed as a cultural, architectural or historic building of significance because it does not qualify for such designation under either the City's or the Foundation for San Francisco's Architectural Heritage's rating systems. The building is not rated by Heritage; it is rated "1" (on a scale of a high of "5" and a low of "0") by the Department of City Planning. It is not on the City Planning Commission's list of "Architecturally and/or Historically Significant Buildings in the Downtown". The Foundation for San Francisco's Architectural Heritage is aware of the project (the Foundation received both the Initial Study and the Draft EIR and has been contacted by telephone) and has expressed no interest in removal of the building. The San Francisco Landmarks Preservation Advisory Board has indicated, through its secretary, that it has no interest in the building (Jonathan Malone, Secretary, Landmarks Preservation Advisory Board, Memorandum, December 10, 1982).

The shadowing and scale characteristics of the existing building compared to the project are discussed in the Urban Design Impacts section of the EIR, beginning on p. 47. These do not constitute cultural issues.

Judgment of the aesthetic value of the building is subjective. This consideration can be addressed by the City Planning Commission at the time of Discretionary Review of the project.

The Fireman's Fund Building was built in 1950 as the Home Insurance Building. It is of reinforced concrete construction with a brick facade on the upper three stories and stone (probably imported limestone) on the ground floor. The large ground-floor windows are arched with keystone detailing; the doorway is topped by a lintel under a broken pediment. The building has cornices above the first and fourth stories. The roof is crested above the fourth-story cornice. The clock tower sits above a small fifth story at the southeast corner of the building. Fifth-story windows, topped by lintels ornamented with keystone detailing, are separated by pilasters; the clock tower is a cupola with open eaves and dome roof. The clock tower is an example of colonial architecture, as are other elements of the building's design. The building could be classified as "colonial revival" in style.

The architect was T.H. Englehart of New Jersey, and Meyer and Evers were local architects associated with the building. Frederick Meyer, a native of San Francisco, was an important local architect. He was one of the architects responsible for planning the Civic Center, and along with other architects, designed many architecturally significant buildings in the downtown. Some of these are: the Rialto Building; the Exposition Auditorium; the Terminal Plaza Building; the Foxcroft Building; the Humboldt Bank Building; and the Monadnock Building.

The following has been added to the EIR on p. 26 as the 2nd sentence in the 1st para. under the heading "Design":

The building is not rated by Heritage; it is rated "1" (on a scale of a high of "5" and a low of "0") by the Department of City Planning.

RELATIONSHIP OF THE PROJECT TO THE URBAN DESIGN ELEMENT OF THE COMPREHENSIVE PLAN

COMMENT

"P. 53, 'Objective 1, Policy for City Pattern; Recognize and protect major views in the city, with particular attention to those of open space and water.' That doesn't belong in here. I mean, they put in policies that are irrelevant so that it looks like they have all of these wonderful, positive impacts. Is anyone saying that's part of the view corridor? I'm not. I don't think anyone is saying that that building right now -- there is a view corridor over that building. And so I don't see what protection of major views in the City is relevant.

"Recognize that [buildings]', Policy 3, 'when seen together, ... produce a total effect that characterizes the city and its districts.' That's a ridiculous thing to talk about. Part of what's happening at that corner is a variety of heights of buildings in a context that is different from the canyon effect that you get on Montgomery St. Kearny and California has a very different feel than Montgomery and Bush, than Montgomery and California, even. And it's because there is a variety of architectural styles, a variety of heights, and a lot more open sense, because the streets are wider, and because there is sunlight there. I think that that's part of the urban context that you look at in these urban design policies. And they talk about architectural amenities. I mean, the kinds of things that come out in the relationship of project to policies are b.s. architectural relationships, and they really don't address what is the basic urban context.

"Recognize the character of older development nearby.' I mean, why are you putting these [Urban Design Element policies] in here? They bother me. They are offensive.

"On p. 55, Policy 6, 'Relate the bulk of the buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance.' The response is that it would be similar in bulk to other buildings. It is not going to be similar to bulk because it is going to be much, much larger and will mimic the 555 California St. building, and it will, by the terms of the photos in this EIR. It's not going to be similar to the buildings that are on Kearny St. north of California St. Those are low-scale buildings. Even 550 Kearny with the addition on it is going to be a midget compared to this building. And to say that you are relating the bulk of buildings to the prevailing scale is -- what is the prevailing scale? I guess the prevailing scale at that intersection, simply because the Bank of America is there, is the Bank of America scale. It is not the prevailing scale of the area. It is not the prevailing scale definitely of the area to the north one block. It isn't. That's Chinatown, and it's much lower.

"On p. 54, No. 7, 'Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.' That's the same kind of answer. I mean that one -- my same comments on that. The intersection is varied there. There is light in that intersection. There is a human scale in that intersection, in part because the Fireman's Fund building is there, and because the other buildings on Kearny St. are much more in scale." (Sue Hestor)

RESPONSE

The EIR describes the project's relationship to the Comprehensive Plan. The Urban Design section compares the manner in which the project would address relevant policies and objectives of the Urban Design Element of the Comprehensive Plan.

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Objective 1, Policy 1 states, "Recognize and protect major views in the city, with particular attention to those of open space and water" (item 1, Table 3, p. 53 of the EIR). As shown in Figure 15, p. 49 of the EIR, east-facing views on California St. from the slope of Nob Hill provide a view of the Ferry Building and one arch of the Bay Bridge. This view is available to riders of the California St. Cable Car line as well as pedestrians and drivers; because of the importance of this view, the project's effect was considered relevant to this policy. A portion of the building is visible in this view, including the sloped roof, wrought iron cresting, end window bays and curved middle window bays.

The highrise office buildings of downtown characterize this district as a financial center. Policy 3 refers to districts rather than to particular intersections or portions of particular streets. The urban context does include immediate site vicinities and the relationship of the project to site surroundings is discussed in the EIR text. It is also presented graphically on pp. 47-52, and discussed under items 3, 4, 5, 6, 7 and 8 of Table 3, pp. 53-55 of the EIR, and is discussed further in this response.

Policy 6 of Objective 2 states: "Respect the character of older development nearby in the design of new buildings" (item 3 in Table 3, p. 53 of the EIR). The project would be a new building and this policy is relevant to its relationship to the architectural elements of existing older buildings. The EIR describes the relationship of the project's architectural elements to those of existing older buildings in the discussion under item 3 in Table 3.

Objective 3, Policy 6 states, "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction" (item 8, Table 3, p. 55 of the EIR). Bulk relates not only to height, but also to breadth of buildings. The horizontal dimensions of the project are similar to, and in some cases the same as, the horizontal dimensions of neighboring buildings, including 550 Kearny St., 550 California St., 401 Montgomery St., and 650 California St. (the Hartford Building). Buildings located immediately north of the project block (see Figure 17, p. 51 of the EIR) are shorter and have narrower frontages than buildings surrounding the project site. The appearance of bulk can be mitigated in a large building through the use of design elements. The project design incorporates an articulated facade with bay windows and columns, a three-part composition (defined base, mid-section and top), and is light in color. Figure 2, p. 9 of the EIR, provides a comparison of lot dimensions and thus building dimensions. As shown in that figure, the project would be about half the width of the Bank of America tower (555 California St.).

The project would be about 460 ft. shorter than the Bank of America tower, and the design components and color would be different. The project would provide a contrast to the Bank of America rather than be an imitation. The project would have the same horizontal dimensions as the existing Fireman's Fund Building.

The scale in terms of height is very mixed in the project area. Existing buildings on the project block range from 40 ft. to 145 ft.; on the block to the west, buildings range from 60 ft. to 465 ft. Immediately to the north, buildings are low-scaled, but further north on Montgomery St., large-scale buildings are present. The Chinatown area is primarily low-scale, with some tall buildings. As the EIR notes under Item 7 in Table 3, p. 54, the project would be about the same height as the Liu Chong Hing Bank, about twice as tall as adjacent buildings, and less than half as tall as the Bank of America tower (heights of buildings in the site vicinity are shown in Figures C-1, -2 and -3, pp. 253-255, of the EIR).

RELATIONSHIP OF THE PROJECT TO THE COMPREHENSIVE PLAN

HOUSING ELEMENT

COMMENT

"[Y]ou have a lot of padding in these EIRs to show about how all of these projects meet the Master Plan standards, though I see nothing in any of these EIRs on how they meet the Housing Element of the Master Plan standards." (Sue Hestor)

RESPONSE

The relationship of the proposed project to the Residence Element of the Comprehensive Plan was not discussed in the EIR because the objectives and policies do not directly relate to the project. The project does not include on-site housing; the project would not replace any existing housing; the project site is not adjacent to any housing; and the project would not occur on land designated for residential development as a primary use.

Included as part of the project, on pp. 97-98 of the EIR, is a measure which would conform to the policy of the provision of housing in conjunction with office development contained in the Office Housing Production Program guidelines.

COMMERCE AND INDUSTRY ELEMENT

COMMENT

"[T]his project does not appear to meet the goal of social equity, which is the goal of our commerce and industry element. We have three big goals in our commerce and industry element, and one of them is social equity. And this is a project for upper income executives, and it's going to displace current uses, it's going to displace potential users who could afford that space at rents that would be much more in tune with a not-skyrocketing inflation on uses, and which would be available to people who tried to keep "back-office" uses in this City. Why should downtown land be exclusively allocated to people in the top 10% of the economic scale? Please tell us what social equity we're getting -- which is a goal of the commerce and industry element. What are the social benefits of a project catering to the rich and generally well-off (Obj. 1, Policy 1). ... This project does not appear to meet the Goal of Social Equity. Please explain why a project for upper income executives and way upper income condo buyers should be allowed to displace current uses and potential users who could afford the lower rents for that space and why downtown space should be exclusively allocated to people in perhaps the top 10% of the economic scale (p. 5 of C&L element).

"On p. 20, what is the current rental value of the space in that building? Last week you heard the Mayor talk about the need to keep 'back office space.' I think every one of these EIRs needs to have in them what is the current rental rates of space that is being demolished, and are you by your decision eliminating 'back office space'? I have a feeling that there is a pretty high proportion of 'back office space' at that particular building, at that particular location. And you don't have that information in any of these EIRs that happen to eliminate currently existing office space. So are you on a collision course with what the Mayor enunciated last week as her policy, which is what the policy is that you

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are to implement. ... I know Fireman's Fund owns the building, but tell us what the fair market rental value of that space in its current state would be if it were kept on the market rather than having this project go in, and how much is the space here going to rent for? What are the economic incentives that you are putting into downtown by allowing that much space at that level of rent? Note trend to move many offices out of city because of disproportionate emphasis on executives rather than peons in San Francisco planning policy - even encouraging displacement of such uses South of Market by twisted interpretation of allowable uses in Planning Code. ... How much rent were those tenants that are being displaced paying? What kind of people did they employ? Are they the kind of diverse, not particularly highly skilled businesses that the [Commerce and Industry] Element wants to retain? Will they go out of business? Will they have to raise their rates to pay the higher rents?

"Ditto for goal of environmental quality - 'the pursuit of employment opportunities and economic expansion must not be at the expense of the environment appreciated by all.'

"Please explain how this will also meet the economic vitality goal of a 'diverse' economy - isn't this just more of the same? Objective 2 - 'excessive dependence on the "fire" sectors also has implications for personal lifestyles, as more and more residents are dependent on office 'paper jobs' for their livelihoods.' Please analyze project against that statement and goal/objective of keeping city base diverse, rather than heavily concentrated in 'fire' uses.

"Objective 3, 'Provide expanded employment opportunities for City residents, particularly the unemployed and economically disadvantaged. The employment mix currently on site (and before any recent moves) needs to be matched, proportionately, against the project under consideration. Will the unemployed get a few janitors jobs, and lots of access to high paying upper management professional jobs? Ditto for Policy 1 under this objective. Policy 2 notes that highly paid people generally are less inclined to live in San Francisco. ... [M]ost of the highly paid workers will continue to commute from the suburbs. This is a violation of that policy.

"Objective 6 - this project violates Policy 1 in that the social and environmental costs to the public are only matched by benefits that are economic to the developer. The draft clearly shows that public facilities are becoming strained. Please analyze this project in light of this policy. Policy 3 is also being violated.

"Please document the need for further strengthening of the C-3-0 district as a compact center for financial, technical, professional and administrative services. Is it currently weak in that area? Will the area continue to be 'strengthened' even if it collapses under its own weight in the areas of traffic, transit, pedestrians, bridge capacity - which findings are made ... in the information available in the EIR which talks about extended rush hours, cars unable to come into the city because capacity reached, Muni way over capacity? IS THIS STRENGTHENING DOWNTOWN BY BRINGING THE SYSTEMS TO A NEAR COLLAPSE?" (Sue Hestor)

RESPONSE

As noted in the EIR on p. 20, para. 1, and on p. 30 under "Site History", Fireman's Fund employees at the site are not being displaced by the project but are moving to new quarters in One Market Plaza as part of a consolidation effort. The firm's branch operations outgrew the 580 California St. building and occupy space in several buildings in San Francisco. Some portion of these jobs will remain in San Francisco. Fireman's Fund is moving its headquarters operations to Novato; this move is also not

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a result of the project (William Newberry, Manager, Real Estate Department, American Express Company, telephone communication, April 28, 1982; Fireman's Fund is a wholly owned subsidiary of American Express Company).

The project would not be displacing potential future "back-office" uses. Because of the favorable location and good condition of the existing building, fair market rental rates would be about \$28 per net sq. ft. (Norman Spencer, Coldwell Banker, telephone communication, November 17, 1982). This is similar to projected net rental rates (in 1982 dollars) in the proposed project of \$30 per sq. ft.; see p. 18, last sentence, 4th para., of the EIR). The existing building thus does not constitute "back office" space. The project site is currently occupied by commercial users. The project would increase the intensity of office uses on the site.

The project would not result in the production of expensive condominiums. The housing proposed to fulfill the housing requirement would be low-income rental housing.

Portions of this comment concern broad social questions which are not within the purview of CEQA and do not relate to the effects of this project on the physical environment. The project as a whole would accommodate approximately 1,345 permanent full-time jobs with salaries ranging from the clerical level to the management level. The project would also provide additional jobs in other sectors of the economy through a multiplier effect. Potential tenants of the building have not been identified; employees and clients of project tenants would be likely to derive from many socio-economic levels, not necessarily exclusively from upper-income levels. Objective 3 is intended to be applied citywide embracing all types of economic activities. The quoted objective and its policies, including Policy 2, are directed toward overall public efforts rather than site-specific private efforts.

The project site is in the limited C-3-0 portion of downtown San Francisco designated for office use by the City Planning Code. Diversity is achieved through the overall mix of economic activities in the City consisting of retail, hotel, entertainment, service, wholesaling, shipping and manufacturing uses found in the other districts zoned primarily for each of these uses.

The "FIRE" sector referred to is finance, insurance and real estate, three classifications of activities occurring in the Financial District. As noted in the previous paragraph, the economic diversity of the City is achieved by the overall City-wide mix of activities. Each component of these activities is found in zoning districts in which zoning regulations are geared to the protection and enhancement of each kind of activity. The existing site tenant, Fireman's Fund, provides employment in the FIRE sector. The project would be likely to provide employment in this sector as well.

Objective 6, Policy 1 is: Encourage continued growth of prime downtown office activities so long as undesirable consequences of such growth can be avoided." The EIR responds to this policy in its analysis of the project in terms of the factors cited in the policy: 1) impact on use of land for parking, congestion, air pollution and energy use; 2) impact of street level winds on pedestrians; 3) noise; 4) impact on scale and character of the city; and 5) impact of increased employment density on existing services and on the housing supply. Policy 3 is directed toward public actions, in this case, to "assure that Downtown development is compatible with the design and character of San Francisco." The City Planning Commission would make a finding of the project's conformity with the Comprehensive Plan objectives and policies, including its social equity.

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For a discussion of infrastructure expansion to meet the needs of continuing development, see 81.61E, 135 Main St. EIR Supplement, Summary of Comments and Responses, p. 41, certified November 30, 1982.

In summary, the discussion points out that since transportation infrastructure has been increased in the past to meet the demands of anticipated growth, it is reasonable to assume that similar types of planning efforts will result in further increases associated with normal functioning of an urban region.

During the period between 1960 and 1981, the transportation infrastructure in the Bay Area was expanded to meet projected regional transportation demands. The BART system and the regional freeway system were two systems based upon regional projections for 1990. Rather than increasing BART's infrastructure, it is only necessary to capture the unused capacity potential (e.g., shorter train headways, longer trains). Though the regional freeway system has not been completed to its originally planned levels, it is possible to optimize its carrying capacity through increased vehicles occupancies (e.g., bus transit and ridesharing).

Similarly, in all of the bus transit systems, the necessary portion of the infrastructure -- the street and highway system -- is already in place. Increases in capacity can be accomplished through additional vehicles and route restructuring. It is not necessary to expand the street and highway system to increase the capacity of bus transit systems.

Funding for transportation infrastructure improvements comes from a variety of federal, state and local sources, only one of which -- the state gas tax -- can be considered secure. However, implementation of improvements with gas tax funds is a matter of public policy, as is the level of funding that comes from federal, state and local sources. Considering the uncertain nature of current government fiscal policy, any projection of future funding sources would be uncertain and unreliable.

In terms of water consumption, cumulative downtown office development would increase water demand by about 2.1% over fiscal year 1981-82, and the City does not anticipate any problems in meeting systemwide increases in water demand.

Concerning sewer capacity, sewage generated by cumulative downtown office development would add to the dry weather flow of the existing combined storm and sanitary system which has an excess dry weather capacity. Until completion of the City's wastewater expansion program, which is now under way, cumulative development would contribute to existing overflows into the Bay during adverse wet weather conditions. Since those overflows are caused by citywide volumes of rainwater entering the combined sewer system, cumulative development would not cause a significant increase in the number of overflows or the volume of wastewater which may overflow. The expansion program is being implemented to provide improved treatment and capacity for combined sanitary sewage and rainwater runoff. The improvements are not related to increases in City office space.

The office vacancy rate, which is below a normal rate of 5%-7%, indicates that demand for expansion in the office sector is present. Provision of space to meet this demand in the C-3-O District will reduce the pressure for conversion or displacement in other zoning districts. The EIR presents a worst-case analysis for transportation impacts, assuming all developments will occur as proposed, assuming no increase in

infrastructure capacities and no change in travel patterns. The period of analysis extends to 1990. Changes in capacities are not likely to be physically addressed by the appropriate agencies until the need can be documented. Included in the cumulative analysis are projects which may or may not be built, and government agencies are not likely to proceed with implementation and funding of capacity increases based on this data. For information on transportation effects, refer to p. 174 of this document and p. 72 of the EIR.

EMPLOYMENT, HOUSING AND FISCAL FACTORS

OVERSUPPLY OF OFFICE SPACE

COMMENT

"The draft EIR does not adequately discuss the economic impact of overbuild in the downtown core area. The draft EIR briefly notes that the current downtown building trend could result in a commercial office space oversupply. (Draft EIR, p. 68.) This oversupply could reach a peak in the mid and late 1980s. One of the major effects of an oversupply, which the EIR does not analyze in depth, would be a decline in commercial rents and an increase in vacancy rates.

"On p. 104 of the draft EIR, 'denser development' in the downtown area is cited as a significant environmental impact that cannot be eliminated. The environmental analysis does not inquire into the need for this continued high density development -- it does not inquire into the reasonableness of continued build-up concomitant with a projected oversupply. This inquiry must be made, and response thereto proffered." (San Franciscans for Reasonable Growth)

"Newsweek, October 11, 1982, p. 96, Office Space Goes Begging. Cites office over-building and vacancy problems, specifically in San Francisco. Mentions problems with 353 Sacramento St. Question raised - is San Francisco on the verge of an office space glut because of overproduction and extremely high rent? What would be the consequences to the City if such were the case. ... Vacancy rate information and trends not up to date as I read the papers. ... [T]he office market is much softer than that reflected.... I talk at length in these comments about the vacancy rate in the soft office market. I had a meeting yesterday with some downtown development people ... and two of them were leasing agents for major real estate firms downtown, and their question of me was, 'Why is the Commission continuing to approve this stuff when we can't move it?' They were asking me what is the motivation of the Department and the Commission, and I had to throw up my hands in horror. But people out on the front lines who are responsible for leasing space -- I have heard from people from Coldwell Banker, from Milton Meyer, and from Grubb and Ellis, from staff people that are responsible for leasing....

They are talking to me about the context of how soft the market is, and how they are having to really come down in the rates, and how people are afraid that buildings are going to start coming on line and they are not going to have any tenants. And the response that we get in these EIRs are these old phone calls. And I think all of us who read the papers have seen that there is a different context downtown. ... [I]t bothers me that we are continuing to accelerate the pace rather than decelerate the pace in the face of all of that. And I really wonder what the policies are that guide those kinds of

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decisions, because it certainly isn't rational urban design, and I don't think its rational under the Commerce and Industry Element. And I know it's not rational in the context of the Housing Element and the housing policies of this City, because we still have very severe problems." (Sue Hestor)

RESPONSE

Office vacancy rates of below 1% were common for several years in San Francisco, and may have become accepted as "normal". However, the low rates indicated that supply was far below demand (a vacancy rate of 5%-7% would indicate a competitive market). High lease/rental rates and an increase in office development proposals were the economic response to this situation.

The lead time required to get a building on line is more than 2 years. Much of the space begun as a response to the market is now or has recently come on line. Coldwell Banker reports a September 1982 office vacancy rate for downtown San Francisco of 3.6% (Coldwell Banker, September 30, 1982, Office Vacancy Index of the United States), a sharp increase from March (when the reported rate was 0.8%) and a slight increase from June (a reported rate of 3.4%). The Index states that, for the nation as a whole, "Large supplies of new office space remain under construction, suggesting further vacancy rate increases in future quarters. Despite higher vacancy rates, however, the total amount of office space occupied has never been greater." San Francisco had one of the lowest vacancy rates reported for the 22 areas covered in the report. San Francisco's reported rate indicates a healthy market with continuing strong demand.

Other factors besides actual space availability affect rental rates: 1) the high price of downtown space when supply was low resulted in some firms being priced out of the downtown San Francisco office market and entering markets elsewhere; 2) escalating inflation, high levels of unemployment and the poor state of the economy has inhibited the expansion of many firms typically occupying downtown space (although the FIRE and business services sectors continue to grow and are still relatively healthy - see California Labor Market Bulletins, issued monthly, and Annual Planning Information, San Francisco - Oakland Standard Metropolitan Statistical Area, San Francisco City and County, 1981-1982, May 1981).

A positive aspect of inhibited demand and an expansion of the supply is that upward pressure on lease rates is reduced, which could result in reentry of some firms into the downtown San Francisco office market. Whether prices have actually been reduced is questionable (price is not the rate which is asked, but the rate which is paid; the asking price may go down but normally would be unlikely to be less than previously received for the same space).

As supply continues to approach a balance with demand (which is likely given the number of buildings nearing completion and approved) price pressures will continue to diminish and a greater number of tenants with wider income ranges will have access to downtown space. Judging by the number of proposed office buildings, office building developers apparently expect continued demand, although not at the same level experienced in 1981.

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Some portions of the comment refer to areas which are beyond the scope of the report and beyond the control of jurisdictional agencies, such as the level of rental rates, the number of development proposals which are received by the Department of City Planning and the types of tenants locating in the new space. The vacancy rate may influence the level of development and lease rates, but is not necessarily a determining factor in the approval or disapproval of proposals by the City Planning Commission.

REGIONAL OFFICE MARKET AND EFFECTS

COMMENT

"[The EIR] talks about the City of Oakland and San Mateo and Contra Costa County experiencing increased demand from businesses relocating from San Francisco. It then has a sentence which is a new one: 'For example, approximately 6.0 million sq. ft. of office space in nine new buildings are currently proposed for construction in the City of Oakland over the next 10 years.' I think we also ought to have figures from the planning departments of San Mateo and Contra Costa County if we're going to mention them all three together. It seems to fit in a little bit with what Ms. Hestor was saying a couple of weeks ago about the building around us as well as the building that's here, and what are the impacts going to be. So getting some facts and figures about these other places may be a start.

"We should have discussion of cumulative effect of Oakland, San Mateo, Contra Costa and Marin on housing and transportation, since they are mentioned earlier in the EIR." (Susan Bierman)

"San Francisco is not the only office center in Bay Area. Please explain role of other East Bay counties in relation to office growth (back offices), 'clean' industry a la Silicon Valley, Oakland alternative to San Francisco - so that regional context of development demand for housing, transit, transportation, air quality and encroachment on open space can be seen.

"San Francisco Examiner, September, 15, 1982, p. B14. Consultant to assess impact on downtown. Oakland has allocated \$500,000 to evaluate the impact of new downtown construction. Cites 18 million sq. ft. proposed within past year in downtown Oakland redevelopment area. Bottom line from Oakland planning director - 'At what point can the downtown no longer take any more developments?'

San Francisco would not be so faint-hearted that its 'leaders' could not utter t o e wo Factor in the development planned in Oakland, since that development will clearly impact the ability of San Francisco to latch on to freeway, bridge, transit and regional housing capacity (not to mention air quality standards) to accommodate its development schemes.

"East Bay Express - August 20, 1982 - pp. 1 and 11. Cites difference in rental costs between San Francisco and east bay as fueling the fires of development in Oakland. Lists buildings that will house 60,000 new workers. Oakland story above related only to redevelopment area. This includes entire city. Relation to San Francisco - as above in Examiner story, but implications greatly multiplied." (Sue Hestor)

"The section on cumulative development is extremely important. On p. 68, the DEIR notes that there is 17.4 million sq. ft. of development approved, under construction, or under formal review by the City Planning Department. The DEIR then lists regional housing and transit impacts associated with this cumulative development.

This regional analysis is only accurate if there is only the City and County of San Francisco generating the regional housing demand. This is not the case. In order to get sure feel for what type of development is going on in the Bay Area, which has impacts on San Francisco housing, transit and transportation, the DEIR should include a table showing the amount of office development under construction, approved, or under formal review in each of the Bay Area Counties. I believe this information should be readily available since each planning commission must have a log of its planned actions. It is essential to see what is going on in other counties in the Bay Area because of the common housing and transit markets.

"In addition, Table E-1 should be modified (p. 275) and the changes in this table should be reflected in the DEIR housing and transit analyses. The title of the table is projected effects 1982-1990. However, the analysis is based on 16.1 million sq. ft. of development between 1982 and 1990. Table B-3 on p. 250 shows 13.1 million sq. ft. of office space under construction or approved which will be built before 1982. The estimate that only 16.1 million sq. ft. of development will be built by 1990 is therefore unrealistically low. This figure should be revised upward.

"P. 59 of the DEIR shows that 1,345 new jobs will be created in San Francisco as a direct result of this building and an additional 1,320 service jobs will be created in the Bay Area. Thus, for each direct job, approximately one additional indirect job is created. Table E-1 does not reflect the indirect number of households that will be created as a result of cumulative office development. Thus all the numbers in Table E-1 are approximately half of the actual housing demand. This table should be revised to include indirect jobholders and their housing demand.

"[A]fter Table E-1 is revised to more realistically reflect the amount of cumulative development by 1990 and the impact of secondary (indirect) jobholders, an additional table with the same headings should be included to show the housing demand based on planned development in all counties.

"In addition to the housing analysis in Table E-1, [as regards] the effects of the acknowledged (on p. 60) creation of one indirect job for each direct job, the transit and traffic and air pollution analyses should be revised to reflect the doubling." (David Jones)

RESPONSE

Neither the Contra Costa nor the San Mateo County Planning Department maintains figures on developments county-wide (including both incorporated and unincorporated areas). A report prepared by People for Open Space (POS), October, 1982, Proposed East Bay Office/Industrial Development, contains development figures for Contra Costa County based on information from various planning agencies and environmental impact documents. Office and retail totals for Contra Costa County are 27.2 million sq. ft. (This report has not been endorsed by the County; some of the methodologies used in the report are the subject of disagreement.)

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The Concord Redevelopment Agency is responsible for most of the office development there (Kevin Garrett, Concord Planning Department, telephone communication, December 17, 1982); the Redevelopment Agency confirms the information supplied in the POS report of 4.05 million sq. ft. of office and 104,000 sq. ft. of retail space (Pat O'Keefe, Concord Redevelopment Agency, telephone communication, December 17, 1982). The Walnut Creek Planning Department does not maintain a roster of proposed development. The Richmond Planning Department reports about 320,000 sq. ft. of office and 300,000 sq. ft. of retail space are on line for development within the next five years, and Chevron Refinery is planning an additional 720,000 sq. ft. of various types of development sometime within the next five to 15 years (Jerry Rasmussen, Richmond Planning Department, telephone communication, December 17, 1982).

The San Mateo County Development Association referenced the development totals contained in the MTC/BCDC report as the most recent indication of projected development in the County (Henry "Bud" Bostwick, San Mateo County Development Association, telephone communication, December 17, 1982). Although the development totals contained in this report (13.5 million sq. ft. of office and 1.8 million sq. ft. of retail area) center on the area surrounding 101, this is the area being most intensively developed in the County.

The last sentence in the 1st para. on p. 32 of the EIR has been revised to reflect this information. The sentence now reads as follows:

For example, approximately 6 million sq. ft. of office space in nine new buildings are currently proposed for construction in the City of Oakland over the next 10 years, perhaps 27.2 million sq. ft. of office and retail area is projected in Contra Costa County and 13.5 million sq. ft. of office and 1.8 million sq. ft. of retail area is projected for the Highway 101 corridor in San Mateo County./6/

Footnote /6/ has been revised to read as follows:

/6/ City of Oakland, Department of City Planning; "Major Buildings in the Central District," January 26, 1982; People for Open Space, October 1982, Proposed East Bay Office/Industrial Development; and Metropolitan Transportation Commission, September 17, 1982, Draft Report - Travel Impacts of Proposed Development on the Peninsula along Route 101.

The EIR considers the impact of housing demand from San Francisco office development on the areas where employees in San Francisco office buildings are most likely to live, based on several studies of employee residential distribution (see Table E-1, p. 275). The transportation analysis projects effects on local, citywide and regional transportation systems (including roads, freeways, bridges and transit systems) from cumulative downtown development in the context of projections of demand and capacities made by agencies governing the various regional transportation systems. (See the Transportation section of this Summary of Comments and Responses document, beginning on p. 174, for further discussion of transportation analysis methodologies and regional development effects.)

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The following discussion has been added to Appendix B of the EIR, preceding the tables in that appendix.

Projected cumulative office development in parts of the Bay Area outside of the greater downtown area may have environmental impacts. The analysis assumes that all projected development will occur, and does not project corresponding increases in capacity beyond that which is relatively definitively planned. Whether, where, when and in what amounts such development may occur are dependent on a number of factors outside the jurisdiction of San Francisco government agencies. Two such factors are 1) the exercise of zoning, planning and environmental review authority by other jurisdictions and 2) the rate of employment growth throughout the Bay Area.

The following information is provided to describe the possible effects of cumulative office development throughout the Bay Area, and to explain the regional government structure that exists to address those effects.

San Francisco is the center of a nine-county region which has lesser activity nodes in each of the other counties comprising the region. Recognizing the interdependence of each part of the region, local jurisdictions have entrusted regional planning, and implementation of adopted policy measures where appropriate, to regional agencies. Responsibility for the comprehensive regional plan is vested in the Association of Bay Area Governments (ABAG), the agency which forecasts regional growth. The Metropolitan Transportation Commission (MTC) is responsible for coordinating regional transit and vehicular plans and policies. The Bay Area Air Quality Management District (BAAQMD) is responsible for maintaining and improving adherence to air quality standards. These and other regional agencies coordinate their planning and implementation activities on issues of mutual concern.

Long-range planning by the regional planning entities, and planning and implementation by operating agencies, such as the Golden Gate Bridge, Highway and Transportation District, have enabled the Bay Area to absorb the growth that occurred between 1960 and 1981. The continued effectiveness of these agencies in guiding and managing growth depends on their ability to anticipate and prepare acceptable policies for future regional needs, and on the capability of the operating agencies to implement policies.

Within this regional planning framework, development is proposed in each of the region's nine counties. The regional agencies review comprehensive plans for individual jurisdictions and large development proposals that are subject to environmental review under CEQA to determine their conformance to approved regional plans.

Regional housing projections, prepared by ABAG, are presented in Table E-1, p. 275. The housing projections, and other ABAG projections of population and employment contained in Projections 79 (ABAG, January 1980), are based on assumptions concerning demographic and economic trends, local land use policies, and transportation infrastructure. Between 1980 and 1990, total Bay Area population and employment are expected to increase by 564,500 and 314,700, respectively. According to Projections 79, San Francisco resident population is expected to decline by about 9,600, and employment in the City is expected to increase by about 68,500.

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The impact analysis in this report focuses on regional facility capacity available within the 1982-1990 planning horizon. Decisions as to when major capacity increases will be needed are made by implementing and operating agencies in the context of planning done by regional agencies.

The amount of physical development that can be absorbed in the Bay Area is constrained by the rate and amount of economic growth. Physical development occurs in response to perceived demand for the type of project to be built; if there is no perceived demand, physical development will not occur. For example, in the 1970s, regional shopping centers were proposed in San Mateo, Foster City and Redwood City. Only San Mateo's Fashion Island was built, because the central Peninsula could support only one additional regional shopping center in the contextual time frame.

Similarly, market forces limit the amount of office space that can be occupied in the Bay Area during a given forecast period because the demand for office space is finite. The amount of office space that can be occupied in the region during this decade is limited by many factors, particularly regional employment growth, which determines demand, which in turn determines the rate of development.

This relationship is important to the understanding of the potential amount of office space in San Francisco and the region; office space accommodates employment, it does not create it. If a large amount of speculative office space were to be built in Oakland, given the projected level of regional employment growth, it would satisfy a portion of the regional demand. The reduction in unmet demand would be accompanied by a lessening in the rate of development, so that not all of the proposed office space in San Francisco, for example, would be built. (This effect would be limited somewhat by demand for space at the local level, e.g., all companies desiring San Francisco office space would not necessarily be satisfied by office space in Oakland.) If more space were provided than needed, it would not be fully occupied. This report contains a worst-case analysis of cumulative development for downtown San Francisco because it assumes that all projects that are under formal review, approved, and under construction in downtown San Francisco would be built and fully occupied.

Employment growth will be distributed throughout the Bay Area where facilities to accommodate that growth -- including transit systems, infrastructure improvements, office space and housing -- exist, are used most efficiently, or are constructed.

Individual jurisdictions maintain almost unlimited discretion to impose development constraints in the event that development occurs without corresponding increases in infrastructure capacity. As noted earlier, the EIR analysis assumes that all development will occur as proposed without infrastructure increases (beyond those relatively well defined) and describes the effects therefrom. However, it is not reasonable to assume that all projects would be built without any adjustments in infrastructure to serve them.

The figures shown in Table B-3, p. 250, are the amounts of floor areas under construction and approved in downtown San Francisco as of August 6, 1982, not the

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amount which would be completed by 1982. Other office developments which could come on line by 1990 would be added to the table and relevant analyses at such time as they reach a formal review stage. For the subject EIR, only those projects now at that point can be included in analyses.

No model is known to the EIR authors that would allow the quantification of cumulative housing demand resulting from the secondary employment growth due to cumulative office development. Project-specific secondary employment projections are based on an input-output model of the regional economy. This model is not applicable to a projection of regional office employment growth, because many of the secondary jobs that would be induced by a specific project may be contained in another office project already included in the cumulative employment projection. The input-output secondary employment projection technique is based on a model of the regional economy; the model does not have the capacity to project the locations of the secondary jobs within the region, nor to project the residential distribution of secondary job holders. Transportation impacts and secondary employment growth can not be reliably projected.

HOUSING DEMAND FROM CUMULATIVE DEVELOPMENT

COMMENT

"The Draft EIR does not adequately analyze the project's severe impact on housing, or offer sufficient measures to mitigate this impact. The proposed project could result in 1,345 new jobs in the downtown area. According to the Office Housing Production formula (which assumes 40% of new workers would move to San Francisco, and that there would be 1.8 office workers per household) this would generate a demand for 293 housing units. Cumulative office development will add to an already extant housing crisis. Construction of those projects which are or have been formally under review by the Department of City Planning and the Department of Public Works will generate 14,200 new households. This projection is based on a cumulative increase of 16.1 million gross sq. ft. of net new office space, and does not include housing needs which may be generated by projects presently in an early planning stage. Thus, excluded in this analysis is the housing need which may be generated by construction of buildings in the Yerba Buena Center Redevelopment Area, Mission Bay of the Southern Pacific Land Company, the Rincon Hill South Beach Redevelopment Area, and presently unfunded State and Federal office building proposals." (San Franciscans for Reasonable Growth)

RESPONSE

Table E-1, p. 275 of the Draft EIR gives a projection of 6,900 to 14,700 new households attributed to office development in San Francisco (under the assumptions of the formula contained in the OHPP Guidelines and the formula from a study prepared by Recht Hausrath and Associates, economists, for the 101 Montgomery St. FEIR, EE80.26, certified May 7, 1981, pp. 289-329). The distribution of project households in San Francisco and other Bay Area counties (on p. 159 of the Draft EIR) is based on the results of surveys done for five other EIRs (see footnotes to Table E-1, p. 275). These surveys (from 1978 and prior years) revealed that 40% of office employees actually live in San Francisco. The assumption of the OHPP is that 40% of office employees desire to live in San Francisco. Assuming that 40% desire to live in San Francisco, and given the proportionally higher cost of San Francisco housing today, it is apparent that all households desiring to live in San Francisco would not actually find housing in San Francisco because of affordability constraints.

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The analysis in the EIR is based on the assumption that 40% of employees would actually choose to live in San Francisco. This represents a worst-case assumption of San Francisco housing impacts. In order to provide an indication of impacts, where actual data are lacking, CEQA allows assumptions to be made. Neither the portion of the 40% desiring to live in San Francisco, nor their distribution in other counties, can be reliably quantified.

The rationale governing the inclusion or omission of projects from the cumulative analysis is discussed on p. 25 of the EIR. See also Appendix B, footnotes to Tables B-2 (p. 247) and B-3 (p. 250).

RENTAL HOUSING - RENTS AND VACANCY RATES

COMMENT

"P. 32, in the bottom paragraph, [the EIR] talks about two-thirds of the housing stock is rented and one-third is owner-occupied. And then it goes on to say the average market value of a single-family house was \$140,000 in the Bay Area and \$148,000 in San Francisco. And it doesn't give anything about rental housing. And it seems to me that since earlier in the paragraph it says only a third is owner occupied, which must be two-thirds rental, we need some figures in that paragraph about rental also. I don't think we should just have numbers about one." (Sue Bierman)

"[T]hat rental vacancy rate is distorted because many of the vacant units are on the market at outrageously high rents. Low and moderate income housing has nowhere near a 4.2% vacancy rate - especially if it is habitable. \$310 average rent is totally ridiculous and is definitely not what is on the market. Please note how commute patterns change as people increase the radius of acceptable housing locations because of housing costs. What is acceptable these days? When will it be Stockton, Davis, at current rates of expansion?" (Sue Hestor)

RESPONSE

The following material has been added at the end of the last paragraph of p. 32 of the EIR:

"The 1980 Census reports a 1980 median rental rate of \$267 per month; adjusted for inflation this becomes \$310 per month. The Department of City Planning reports a rental housing vacancy rate of 2.67%, which is derived by dividing the vacant rental units by the entire housing stock. The 1980 Census reports a rental vacancy rate of 4.2%, which is derived by dividing the vacant rental stock by the entire rental stock./13/"

The rental vacancy rate of 4.2% was derived from U.S. Census data. The Census did not disaggregate vacant rental units by rental costs. While no data exist that would allow a separate calculation of low- and moderate-income rental vacancy rate, it would be reasonable to assume that the vacancy rate for low and moderately priced rental apartments is lower than the vacancy rate of upper-income rental units.

Census data include residential hotels. The vacancy rate for residential hotels was higher than the vacancy rate for other types of rental units in 1973. This may not be the case today due to the immigration of Southeast Asians who are occupying such

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units, the recent conversion of some residential hotels to transient use, and the withholding from the rental market of some vacant units. The 1980 Census data on this category of use has not yet been processed (M. F. Groat, Department of City Planning, telephone communication, December 3, 1982). The City-wide vacancy rate for rental units reported by the Census may be higher than the vacancy rate for rental units exclusive of residential hotels. Should residential hotels be included in the City's stock of low- and moderate-income rental housing, the vacancy rate for low- and moderate-income rental units may not be lower than the vacancy rate for upper-income rental units.

The distribution of households of project employees is discussed in Table E-1, p. 275 of the Draft EIR. Survey results (see footnote (b) on p. 275) indicate that the distribution of downtown office employees is as follows: 40% in San Francisco, 18% in the Peninsula (San Mateo and Santa Clara), 30% in the East Bay (Contra Costa and Alameda), and 12% in the North Bay (Marin and Sonoma). Available survey data indicate that less than 1% of project employees would live outside these immediate Bay Area counties. No evidence exists that a substantial number of project employees would live in Yolo or San Joaquin Counties, or in Davis or Stockton.

Housing choices are the result of individual decision-making and involve preference as well as housing cost factors. Preference information is complex, involving many factors such as number of bedrooms, type of neighborhood, family composition and commute distance to work. While project employees would probably desire a relatively short commute, the decision of where to live may be affected by the commuting patterns of other household members and their collective relative preference for shorter commuting distances versus suburban housing amenities. Such amenities may include less congestion, more open space, type of school system and other factors. Thus, housing costs may not be the primary factor in determining residential location of project employees and their corresponding commute patterns.

HOUSING AFFORDABILITY

COMMENT

"Pp. 60-61 state that it is difficult to determine the employment characteristics of the tenants of an office building by income levels. I believe an employee survey was done as part of the current Downtown EIR data base development. The (580 California St.) EIR should state if the Downtown EIR employee survey was done and what it determined. The income distribution of office workers determined from this survey should then be used to perform the Housing Affordability analysis in this EIR." (David Jones)

RESPONSE

Employment data collected for the Downtown EIR is undergoing analysis. The data have not been verified or refined. The information is therefore unavailable for use in the 580 California St. EIR housing affordability analysis.

HOUSING FORMULA

COMMENT

"P. 60 says that the City recognizes the data [that] 15 to 30% of new employees would be expected to move to San Francisco. I know our department assumes 40% of the new employees. I don't know what blessing we have given to the 15 to 30% figure, and would like that explained. There's a considerable difference between the figures in this, the low of the 15% would be 141 units needed, and the high, at 40%, is 293. And that's a pretty big spread." (Susan Bierman)

RESPONSE

The formula on p. 60 is from a study prepared by Recht Hausrath Associates, economists, and included as Appendix C in the 101 Montgomery St. Final EIR, certified by the San Francisco City Planning Commission, May 7, 1981. This information is contained in Footnote /3/, p. 71, which is cited at the end of the sentence referred to in the comment. Because there is no absolute information on exactly who would work in the proposed project, the intended purpose of this second formula is to provide a range of information for consideration by the City Planning Commission.

The Mayor's Office of Housing and Community Development has recently clarified the interpretation of the Office Housing Production Program guidelines with reference to the formula being based on the net increase in office area on a site vs. the gross office area on a site. In order for the EIR to be consistent with this interpretation, the last paragraph on p. 60 of the EIR has been revised as follows.

The word "gross" in parentheses in the second sentence has been changed to "net".

The phrase "528 new San Francisco residents" in the third sentence has been changed to "415 new San Francisco residents".

The phrase "293 housing units" in the third sentence has been changed to "230 housing units".

The phrase "total new on-site office employment" in the sixth sentence has been changed to "net new on-site office employment"; the phrase "would generate 198 to 396 new San Francisco residents" has been changed to "would generate 156 to 311 new San Francisco residents".

The phrase "a demand for 141 to 283 housing units" in the seventh sentence has been changed to "a demand for 111 to 222 housing units."

The paragraph beginning at the bottom of p. 97 has been revised; the phrase "the project would generate demand for 293 housing units" in the first sentence has been changed to read "the project would generate a net demand for 230 housing units".

The summary of project housing impacts (bottom of p. 3, top of p. 4) has been revised; the phrase "project employees would generate a demand for about 290 housing units" at the top of p. 4 has been changed to read "project employees would generate a net demand for 230 housing units".

GENTRIFICATION

COMMENT

"P. 70. Please explain what the dispute is regarding gentrification. In the circles I travel in, there is no dispute. Common sense seems to indicate the problem is with us. Rentals in the Haight-Ashbury, rentals in Western Addition, and as I understand, starting in the Mission and certainly Bernal Heights, are markedly increased, and the composition has changed. And I can't believe that there is a very big dispute about them." (Susan Bierman)

RESPONSE

The phrase in question, "although there is some dispute", has been deleted. The last sentence of the 2nd para. on p. 70 now reads as follows:

"It has been suggested that gentrification -- the replacement of low-income households by more affluent ones -- would occur."

ADEQUACY OF PROPOSED HOUSING MITIGATION MEASURE

COMMENT

"P. 98. How can we call senior housing a mitigation for this building's employees' needs? They have offered to pay toward Serenity Towers. I certainly have nothing against Serenity Towers. I mean, I want that project to go, but I think it's a senior tower, and what are we mitigating when we just do senior housing? How are we solving, really, the problem for the people in this building?" (Susan Bierman)

"As the EIR notes: 'Housing demand would increase in an already tight housing market. In market situations where demand outstrips supply, prices can be expected to increase.' (Draft EIR, p. 69). Additions to the housing stock, which could ameliorate this problem, are not likely under current economic conditions. (Draft EIR, p. 70). The housing demand will, therefore, be accommodated by 'increases in the number of office workers per household, and/or displacement of existing residents,' with an increasing trend towards gentrification. (Draft EIR, p. 70). The project sponsor has proposed the provision of equity to a HUD Section 8 73-unit housing project as a mitigation measure. This falls far short of the 293 units set forth above. The EIR only vaguely acknowledges the need for the sponsor to provide additional housing and that measure should be expanded accordingly. (Draft EIR, p. 98).

"The need for housing generated by cumulative office development will result in severe social impacts. Housing prices are likely to rise and low-income households will be replaced by more affluent ones in an ongoing gentrification process. The draft EIR fails to fully analyze these trends and to develop realistic mitigation measures." (San Franciscans for Reasonable Growth)

"[I]t strikes us as appalling that there is not rental housing being required or being submitted as proposed mitigation for the housing mitigation in this building. And if you would please have someone respond to why that is not included or should not be included, it would be appreciated." (Kay Pachtner)

RESPONSE

The sponsor's proposed housing mitigation measure conforms to OHPP Guidelines. Economic and demographic profiles of future employees cannot be determined to the extent that housing could be built to exactly satisfy housing needs for those employees. The need can only be approached indirectly, and for this reason, the Office/Housing Production Program guidelines allow flexibility in satisfying the housing requirement for downtown office buildings.

Many senior citizens find themselves in a housing situation which is described in planning terms as "overhoused". Their children move away, sometimes one spouse may die, and the family home is larger than needed. While some senior citizens prefer to remain in family homes, for many, home maintenance becomes increasingly difficult. They are unable to move into more suitable housing because it is more expensive (it is much more costly in comparison to relatively low interest rates on mortgages which may be 10 or more years old and smaller than new mortgages). By increasing the supply of senior housing at affordable rates, seniors can afford to move and thus "free up" the units they were occupying previously. The result is a net addition to the housing stock. Because the freed-up units are existing homes, purchase prices are generally lower than the prices of new housing units.

In San Francisco, many seniors live in residential hotels that provide small accommodations at reasonable rates. To the extent that the housing provided by the project sponsor is occupied by seniors presently occupying rooms in residential hotels, these units could also be made available, providing an increase in the supply of affordable units.

As noted in the mitigation measure at the top of p. 98 in the EIR, the housing measure proposed by the sponsor would qualify for 146 credits under the Office/Housing Production Program Guidelines because the units would be low-income units. As the measure states, "multiple credits" are allowed "for these units (two credits for one) ... to 'promote and stimulate the production of affordable housing' in the face of 'economic considerations which dictate that economic incentives be given' for this purpose."

The sponsor has contributed to the City's Shared Appreciation Mortgage Revenue Bond Program in an amount sufficient to fulfill the remaining portion of the housing requirement for the 580 California St. project.

The 73 units of housing provided through the sponsor's agreements for Serenity Towers would be rental housing. However, the Office Housing Production Program guidelines do not specify the type (rental vs. purchase) of units to be supplied, nor does this appear to be necessary because implementation of the guidelines has resulted in the production of both rental and purchase dwelling units.

COSTS TO CITY

COMMENT

"P. 65, costs to city - this entire section is focused on this particular project, rather than on cumulative impact. It is irrelevant if in isolation the project may not require that much city service if the cumulative amount results in so much congestion, air pollution, urban ugliness that the City has to take enormous steps to undo the mess. E.g. traffic

congestion that will result in Muni not being able to function, necessitating huge increases in its budget because of reduced number of runs in rush hour, expenses of changing street patterns, expense of traffic cops to monitor absolutely impassible intersections to make things flow a little." (Sue Hestor)

RESPONSE

Impacts of the project on the various community services are discussed in the Initial Study, Appendix A, p. 223 of the EIR. Costs for community services such as fire and police protection, schools and energy facilities are expected to decline on a per capita served basis. Because of the increase in the number of people served, total costs for community services would be higher than without the project. Increased traffic patrols, if instituted, would represent part of this additional cost. The EIR states (1st para., p. 68) that costs for servicing the site would increase.

As shown in Table 5, p. 64 of the EIR, revenues from the site would also increase, although under Proposition 13, property tax revenues would be limited to a 2% increase per year after the initial reassessment based on the market value of the new building. If the property were sold, the assessment would once again reflect market value at the time of sale since reassessment at the new market value is permitted by Proposition 13.

The cumulative fiscal impacts of the project in relation to other downtown development is discussed on p. 70, 4th para. of the EIR. The discussion on pp. 62-68 describes project-specific fiscal impacts.

See also the response to the comment under the subheading "Calculation of Muni Deficit", p. 171 of the Employment, Housing and Fiscal Factors section, for a discussion of costs for Muni.

TRANSIT FUNDING

COMMENT

"What is cumulative impact on BART with 18.4 or 55 million sq. ft. of development? Where would they get the equipment to provide that service? How realistic, given funding circumstances, are each of the five-year plans (please ask MTC)?" (Sue Hestor)

"The DEIR should indicate if each transit system will have the revenues necessary to implement its five-year plan. In other words, is each transit district's five-year plan accurate and being followed or have federal fund or general fund cutbacks reduced projected increases? The DEIR should indicate the current status of each five-year plan and estimate where (between the 'Existing Capacity' and the 'Proposed Capacity' columns in Table 7) each system will be based on current knowledge. What I am asking for is an evaluation of whether the 'proposed capacity' based on five-year plans is actually achievable given monetary and lead time constraints. The EIR should inform the public as to whether the "proposed capacity" is real or just a planner's dream." (David Jones)

RESPONSE

It is not possible to project fiscal impacts on BART of cumulative development with the information available. (See the response to the comment under the subheading "Cumulative Downtown Development List", p. 129 of the Land Use Section of this

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document for a discussion of what projects are included in the cumulative analysis.) The estimate contained in the EIR of costs to BART which are attributable to the project is based on an analysis of average operating costs per passenger trip prepared by BART. Operating costs per passenger trip reflect the additional cost to BART of additional passengers. This analysis technique is only applicable to small additions of passengers, such as passenger trips added by a single office building. A cumulative analysis would also have to include capital costs that may be necessitated by a large increase in passenger trips.

Capital costs projections made by BART through 1990 are approximate in nature. Capital costs (both existing and future) cannot be prorated by geographic location (San Francisco), time of day (peak hour), or type of rider (office workers). Most of BART's capital expenditures are paid through federal and state revenue sources (Alan Lee, Transportation Planner, BART, telephone communication, October 8, 1982).

The cumulative peak-hour operating deficit cannot be projected because exact fares and subsidies per passenger cannot be projected to 1990. It can be stated that both fares and costs per passenger trip will be higher in the future than they are today. These higher dollar values, however, will be partly attributable to inflation. BART fares and costs relative to inflation cannot be projected with accuracy. The further projections are made into the future, the larger the margin of error (Alan Lee, Transportation Planner, BART, telephone communication, October 8, 1982).

For Fiscal Year (FY) 1981-82, BART attained a net operating surplus of \$7.6 million after applying \$67.3 million in financial assistance from property taxes, the 0.5% BART sales tax and state aid. In 1981-82, BART used \$2.6 million of this surplus to purchase capital improvements (BART 1982-87 Five Year Plan, adopted June 24, 1982).

The BART Five Year Plan projects an overall operating surplus (after property tax, sales tax and other governmental assistance) of \$60.4 million from FY 1982-83 to 1986-87. These funds could be applied to capital improvements by BART to meet cumulative transit needs of the region.

The current 5-year plan cycle (1982-87) has been prepared given the existing uncertain fiscal situation. Each transit agency has prepared a plan that is responsive to federal cuts and subsidy losses, and the plans are updated annually to reflect current financing expectations of the agencies. Table 7, p. 77 of the EIR, shows load factors with cumulative development based on existing levels of transit service as a scenario of no improvement to the transit agencies, and also shows load factors based on planned expansions of capacity. Inherent in the analysis is the assumption that all development listed would occur as proposed.

Transit agencies receive funding for capital improvements from several sources including Transit Development Act State gasoline tax funds, Federal UMTA grants, and State Transportation Assistance Programs, all of which are disbursed through the Metropolitan Transportation Commission (MTC). Jay Miyazaki, Manager of Allocations and Assistance at the Metropolitan Transportation Commission, anticipates that these funding sources and additional sources, such as toll bridge revenue and UMTA Special Programs, will continue to be available in the future (telephone conversation, July 8, 1982). Should funding sources for capital improvements no longer be available or should the amount of funding decrease, sufficient capacity may not be added to these systems in the future. Should this occur, excess travel on these systems can be expected to either shift to another

non-peak ridership mode of travel or to other less crowded times if working conditions permit and off-peak transit capacity is available.

Future policies concerning federal support of local transit systems are beyond the capability of an EIR to foretell, as they are subject to future national policies made on behalf of future national electorates. Section 15140(h) of CEQA Guidelines states that, "If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

CALCULATION OF MUNI DEFICIT

COMMENT

"I object to the Muni analysis being based on a phone call to Bruce Bernhard as the only documented source. This City spent considerable money to develop a rigorous analysis of Muni costs to determine that the cost for transit was over \$9.00 per sq. ft. for a new building (over a 20-year period in 1980 dollars) and has recently completed another Muni cost study as part of the downtown transit assessment district study. The public has a right to have the EIR discuss the factual basis for these studies and their findings. Instead the EIR bases its analysis on a phone conversation which the public must take as omniscient. The EIR should be revised to discuss the findings of the official "one time fee" study (from which the current \$5.00 per sq. ft. mitigation is based) and the transit assessment district study.

"In addition, the DEIR analysis based on a 'marginal' cost of \$0.39 is wrong. This is not a marginal cost for new service which will be required to accommodate new office buildings. The \$0.39 per rider marginal cost is the marginal cost for existing service which assumes all buses and transit vehicles are existing. This analysis does not therefore include the cost of purchasing new transit vehicles. It also assumes that taxpayer subsidies cost nothing, whereas they come from sales and gasoline taxes on residents.

"The Muni cost analysis should be changed to show the marginal cost of new service which includes purchasing and maintaining new transit vehicles. $(1,346 \text{ employees}) \times (29\% \text{ on Muni}) = 390 \text{ people on Muni}$. This would require over five new transit vehicles per rush hour. The costs to purchase, operate and maintain these new buses should be the 'marginal cost' which is analyzed in the Muni cost analysis." (David Jones)

"The cumulative costs to Muni for equipment are considerable, yet the entire focus here is on the subsidy per rider. But on what equipment? Please incorporate Carl Imparato's comments on Muni formula used in Spear/Main Draft EIR. You are still using the same data, so his comments are still relevant. The transit fee is in litigation and the Commission has shown no will to require payment as a condition of approval, i.e., guarantee payment will be there by time building opens, not merely a hope that the courts will sustain the fee and Board of Supervisors won't undo it.

"Reference to Carl Imparato comments on previous EIRs on Muni cost analysis. I am attaching an analysis of the inconsistent figures used in San Francisco EIRs to estimate costs of Muni service. To show how ludicrous the calculations used by Bernhard are:

"Table 7, p. 77 shows that cumulative development will add 11,430 new p.m. peak Muni riders

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"P. 77 notes that with cumulative development the peak p.m. riders will total 36,090

"11,430 divided by 24,660 (36,090 minus 11,430) shows that peak p.m. Muni ridership will increase 46%

"Bernhard says that such service is provided at a cost per ride of 71¢, with average ride revenue of 32¢, leaving a deficit per rider of 39¢

"Therefore, the daily cost to provide p.m. service is 71¢ x 11,430 = \$8,115

"and the daily deficit for that service is 39¢ x 11,430 = \$4,458

"Multiplying that times 260 work-days and doubling it to add people getting to work in the morning

"\$8,115 x 260 x 2 = \$4,219,800 annual cost to provide Muni service to 12,000 new riders

"\$4,458 x 260 x 2 = \$2,318,000 annual deficit to City in providing Muni service to 11,430 new riders

"THIS IS MARVELOUS. A 46% INCREASE IN RIDERSHIP AT A COST OF MERELY \$4.2 million per year." (Sue Hestor)

RESPONSE

As stated in the comment, the marginal cost data provided by Muni does not include major capital expenditures and additional supervisory and support staff that would be required to service cumulative downtown development. The calculation performed in the comment is based on the application of marginal cost analysis methodology to cumulative development. This application is inappropriate because marginal cost data include only variable costs that depend on vehicle trips, including fuel, labor, parts and amortization of the capital costs of vehicles. Other incremental costs, such as the need for more supervisors, overhead (e.g., accountants), new facilities for vehicle storage, and other capital improvements are not included in a marginal cost analysis. A marginal cost analysis is only appropriate for small additions in passengers, such as passenger trips added by a single office building, and is not applicable to a cumulative cost analysis.

A more appropriate technique for determining the costs to Muni of cumulative development would be an average cost analysis which would include both capital and operating costs. Application of this technique, however, is limited because relevant capital cost data are not available from Muni. Further, capital costs are difficult to allocate on a person-trip basis as capital expenditures occur from time to time in large amounts, not necessarily annually. The established method of allocating capital costs is through depreciation, which is based on historical depreciation costs, not replacement costs. Such an estimate would be low in comparison with the costs of new capital improvements required for a single passenger trip. The use of existing capital cost data would underestimate future capital cost needs. Existing Muni accounting statistics do not enable future capital costs to be calculated on a per passenger trip basis (Bruce Bernhard, Muni Chief Accountant, telephone communication, October 20, 1982).

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The data contained in the study prepared on the proposed transit assessment district, City and County of San Francisco, Office of the City Attorney, Transit Assessment District Cost Study, October 1, 1981, cannot be applied to determining the costs to Muni of cumulative downtown development. It was generated to calculate the net current deficit of Muni on a per-square-mile basis. The study also contains data on operating costs per passenger mile and revenue per passenger trip. The total number of downtown passenger trips was not determined, however, for the purposes of the study. According to Bruce Bernhard, Muni Chief Accountant (telephone communication, October 26, 1982), the net deficit per passenger trip cannot be calculated from the data given in the assessment district cost study. According to Mr. Bernhard, data are not currently available that would enable costs per square mile to be translated to a per-passenger-trip basis as would be required for an average cost analysis.

The information contained in the memorandum on Muni's Plan to Accommodate Downtown Growth, by Dean Macris (August 5, 1982), which is based on aggregate demands for transit provided by cumulative development, and sets forth alternative methods of funding such plans contains the most current and reliable data on the subject. The memorandum is hereby incorporated by reference into the EIR.

According to the worst-case scenario in the memorandum, the San Francisco Municipal Railway Improvement Corporation, a non-profit corporation established in 1971 for the purpose of selling bonds for transit improvements, may have to raise about \$111 million through the sale of bonds over a ten-year period to finance Muni expansion. The Muni capital improvements outlined in the memorandum are based on transit demand resulting from the employment trend approach, discussed on pp. 287-289 of the Draft EIR. The memorandum concluded that Muni expects to be able to meet projected cumulative demand due to downtown office development without new City taxes.

The comments of Mr. Imperato on Spear and Main Street Office Building Draft EIR and the responses to those comments on pp. 224-228 of the Spear and Main Street Office Building Final EIR (80.349E, Certified February 11, 1982) are hereby incorporated by reference into this EIR pursuant to Section 15149 of the California Environmental Quality Act (CEQA) guidelines. Briefly, Mr. Imperato felt the Spear and Main Street EIR underestimated the cost to Muni of serving the Spear and Main office building. He felt that cumulative traffic congestion would reduce Muni's average speed from 9 to 8 miles per hour, necessitating about a 10% increase in costs. He calculated that 288 additional peak hour trips would result in the need for 3.84 additional peak hour bus runs costing over \$200,000. The response acknowledged that a decrease in average speed would necessitate additional costs to Muni. The response described the data limitations of the Transit Assessment District Cost Study. The Muni Fiscal Analysis in the Spear-Main Draft EIR was revised to reflect the most current data supplied by Mr. Bernhard, which is also used in the 580 California St. EIR. The above discussion of the Memorandum from Dean Macris updates the data in Spear-Main concerning sources of Muni funding.

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MUNI FINANCING

COMMENT

"P. 67. It should be stated, I think, that to meet cumulative Muni demand, revenue bonds will be necessary, causing probable fare increases. This is in relation to the report saying that there will be no City taxes increased. And I don't think that's enough to say. It seems to me that the report our Director gave us showed that to meet the Muni demand we're going to have to have some bond issues. I think they are revenue bonds. And I don't know where the revenue would come from but the fare box, and that directly affects San Francisco residents' pockets." (Susan Bierman)

RESPONSE

The following sentence has been added at the end of the first paragraph on p. 67:

"According to the worst-case scenario in the memorandum, the San Francisco Municipal Railway Improvement Corporation, a non-profit corporation established in 1971 for the purpose of selling bonds for transit improvements, may have to raise about \$111 million through the sale of bonds over a 10-year period to finance Muni expansion."

The Muni capital improvements outlined in the memorandum are based on transit demand resulting from the employment trend approach, discussed on pages 287-289 of the Draft EIR.

TRANSPORTATION

PROJECTS INCLUDED IN THE CUMULATIVE ANALYSIS

COMMENT

"Kaiser Center EIR, EE81.71, City of Oakland. This project alone would include 4.42 million sq. ft. of commercial space. Please read and incorporate relevant material from traffic and transportation section, much of which deals with demands on regional freeway system (which runs through Oakland and other east bay cities to get to Bay Bridge so people can get into San Francisco) and on BART and AC Transit. Cumulative impact analysis includes approved and proposed projects. Approved projects table, p. 68, includes 1,368,200 office and retail and 970 hotel rooms. Note the inclusion of retail and hotel space factored into traffic analysis. Proposed project list, p. 69, includes projects at various levels of development of proposal and notes same. Total sq. ft. - 14,705,000 in central business district. NOTE ALL ANALYSIS IN THIS EIR INCLUDES CUMULATIVE DEVELOPMENT LEVELS IF ALL PROPOSED PROJECTS WERE BUILT.

"Transpacific Centre EIR - EE81.78 - City of Oakland. Similar to Kaiser Center EIR in terms of issues and information.

"It is not okay to drop retail space, since by terms of your own traffic analysis retail space generates more trip ends than office space, and there are consistent findings on pedestrian and vehicular traffic, transit and formerly air quality, which are all related to the amount of persons travelling to the site.

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"It is not okay to drop hotel space - change the factors if you think it necessary, but they do not have a zero impact on pedestrian and vehicular traffic, etc. - and since they all generate employment, on housing demand. ... Do the relevant calculations, but don't eliminate the projects totally from lists of cumulative development."

"It is also not okay to drop projects like Executive Park from the analysis. If the employment patterns follow San Francisco/commuter mix, there will clearly be all of the traffic/transit related impacts although the location may be modified. Unless you have specific information for a project outside the CBD to show that it has NO impacts on traffic, transit, etc., you cannot zero it out when all of the EIR resolutions are making findings of cumulative impact."

"My comments on 135 Main did not include the full amount of development now planned for Mission Bay. According to their released plan, the amount of office space is 18.4 million sq. ft. and 500,000 sq. ft. of retail/light industry, and 7,000 dwellings. Please add that development into your cumulative impact analysis, especially transit, traffic and air quality. My figures on the amount of cumulative development are now 55 million sq. ft. of under construction, approved or proposed commercial development. Please tell what the impacts of that amount of development will be, especially on the ability to move people into, around and out of San Francisco." (Sue Hestor)

RESPONSE

See the response to the comment under subheading "Cumulative Downtown Development List", p. 129, in the Land Use section of this document for additional discussion of projects included in the cumulative list.

The cumulative development analysis has considered 0.5 million gross sq. ft. of retail space proposed to be built in conjunction with office buildings as shown in Table B-3 on p. 250. The analysis did not consider any free-standing retail space such as Neiman-Marcus, which is the only free-standing retail development downtown which is under formal review, approved, or under construction. The Neiman-Marcus store generates about 200 new p.m. peak-hour person-trip-ends. This would be an increase of less than 1% over the cumulative development increase. The increase would be within the margin of error for the transportation analysis.

Hotel development has not been included in the cumulative analyses because hotel uses have different peak travel characteristics from office buildings and generally do not significantly affect peak-hour traffic or transit. If hotel travel from hotels meeting the criteria for projects included on the cumulative list were calculated (these hotels would include the Olympic Club Hotel, now known as Post/Mason, the Hilton Tower No. 2, the Holiday Inn-Mason St., 790 Van Ness at Eddy, the Holiday Inn-8th St., the Ramada Hotel and the Meridien Hotel), the total p.m. peak hour person trip ends would be 2,680. This represents an increase of 6% over the cumulative total shown in Table 6, p. 74 of the EIR. However, hotel travel patterns are different from office and retail travel patterns. Hotel travel during the p.m. peak hour of the transportation system would be distributed between employees and guests with guest travel comprising about 60% of the total. Hotel employee travel would be primarily in the peak (commute) direction. Hotel guest travel would tend to be more evenly distributed directionally (i.e., less than half in the peak direction) as guest arrivals would be in the contra commute direction.

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For both employees and guests, about 70% of the p.m. peak hour travel would be made to destinations in San Francisco (employee trips would be primarily to residential areas whereas guest trips would be to recreational destinations). Thus, only 30% of the p.m. peak hour hotel travel would be made outside of San Francisco. The 30% of the 6% increase in total person trip ends from hotel developments over cumulative developments considered in the traffic analysis is an effective increase in peak-hour commute direction traffic and transit demand of less than 3%. As the transportation analysis is accurate to within $\pm 10\%$ -15%, the increase would be within the margin of error for the analysis, i.e., after rounding to two significant figures the increases would not be discernible.

Projects which are non-office uses, such as wholesale showrooms, have fewer employees per sq. ft. and different commute times, modes and distribution characteristics than office uses. Therefore, they do not contribute significantly to peak cumulative transportation or air quality effects.

The following projects are not located in the greater downtown area which is the basis for the cumulative analysis: San Francisco Executive Park, Mission & Russia, 350 Beach, 1734 Union, 1969 Union, 2318 Fillmore, 395 Hayes, 1975 Market, Francisco Place, 1099 Sixteenth St., 1735 Franklin, 1581 Bush, 644 Broadway.

The cumulative study area selected was based partially upon the transportation facilities serving Downtown and partially upon topographic constraints. The transportation analysis focused upon the downtown street and transit system including the freeway access ramps. The location of the freeway access ramps partially form the boundaries of the cumulative area on the south and the west. The transportation analysis focused upon peak direction travel from the 580 California project site vicinity. Developments within the cumulative study area were assumed to add travel in the peak direction (heaviest demand direction) on the downtown street and transit system. Locations such as Executive Park or the Bayshore Freeway corridor in San Mateo County would not have a similar effect.

The analyses in the Kaiser Center and Transpacific Centre EIRs are similar to the analysis used in this EIR in that only development in the project area is analyzed. In this EIR downtown San Francisco development is treated as cumulative and in the Oakland EIRs Oakland Central District development in that area is similarly treated as cumulative. For a discussion of regional development, see p. 158 of this document, under the subheading "Regional Office Market and Effects" in the Employment, Housing and Fiscal Factors section, and p. 182, under the subheading "Impacts of Cumulative Development" in the Transportation section.

The accuracy of projections contained in the cumulative transportation analyses is limited by the accumulated accuracy of the individual components. Essentially, the uncertainty in each component compounds, making the overall analysis as accurate as the least reliable component of the analysis. The base data, which are collected as a series of counts (intersection, transit ridership, parking) on individual days rather than being an annual average, is subject to seasonal variations (i.e., more people take vacations during summer months, shopping travel is highest between Thanksgiving and Christmas, fewer people walk when it rains) as well as economic variations that might result from changes in the cost of gasoline, transit fares, and parking costs. The forecast information is based upon trip generation, modal split and trip assignments data that are available for existing conditions.

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The projections do not assume any deviation from existing patterns. As travel patterns tend to be influenced by a variety of factors, including congestion (i.e., each traveler tries to find the optimum method of travelling to and from work), cost, choice of residence location, and individual preferences, the results of the transportation analysis do not reflect possible redistribution of existing travel patterns. Possible changes in traffic patterns are not considered because no reliable method exists to predict the individual choices that would aggregate into future travel patterns.

Further, as the travel demand analysis was based on the various estimates for land use allocation and amount of gross floor area associated with each building, the travel estimates are sensitive to changes in the projected amount of cumulative development. That is, the analysis is based on the assumption that all of the development considered will occur, and will occur as proposed. To the extent that projects are dropped or revised, the analysis contained in the EIR is affected.

The cumulative traffic and transit impact analysis is sensitive also to 1) parking price structures and fuel availability and cost, which affect the modal split; 2) future traffic management changes in the downtown area which could take the form of increased development of transit preferential streets and further restrictions of on-street parking in order to facilitate general vehicle flow; 3) future changes in the operating characteristics of each transit system, which are dependent on policy choices made at the local, regional, state and federal levels; 4) the rate of increase in intensity of land use downtown, with a resulting increase in pedestrian volumes which affect intersection capacity; and 5) changes in the pattern of residential development and choices by individual downtown workers of residence location.

In light of the above uncertainties, the quality of the available data, and the type of trip-generation model used, the overall accuracy of the travel demand projections is in the range of +10-15%.

If the totals considered in the cumulative analysis were adjusted to incorporate corrections current as of November 5, 1982, net new office square footage would increase by about 0.7 million and retail square footage would remain about the same. As the analysis methodologies are accurate only to +10-15%, a change of 0.7 million gross sq. ft. (4%) would not change the results presented in the EIR. The floor areas, both net and gross, of the developments considered in the cumulative analysis presented on p. 247 of the EIR in Table B-2, are shown in Table A, p. 134.

IMPACTS OF CUMULATIVE DEVELOPMENT

COMMENT

"The figures on p. 74 for distribution by travel mode don't match those in the 90 New Montgomery EIR. According to that EIR, 82.5% of workers travel in p.m. peak. Even using your grossly low figure of 16.1 million sq. ft., dividing that by 250 sq. ft./worker = 64,400 new workers x 82.5% = 53,130 p.m. peak trips. Where do you have a table that compares Table 6 to existing conditions so that a measurement of the increase and impact can be made? Is it Table 7? Please note on each of these tables the amount of sq. ft. in each of the calculations so that we know what is the amount of cumulative development measured. The 90 New Montgomery EIR saw shifts to transit because of parking problems. Please factor in the increase in ridership projected in that EIR."

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"[W]hen you read the Spear/Main [F]EIR and 90 New Montgomery, the bottom line is that there is going to be a 65% increase in p.m. peak traffic. [I]n the 90 New Montgomery EIR there is a further factor that says that if the parking problems of the City aren't solved, your modal split is going to be affected, and a lot more people are going to wind up on transit than your projections. [T]he 90 New Montgomery EIR says that they looked at that particular project and said that the p.m. peak trips would be from 125 to 215 if there was not sufficient parking. That is a 72% increase, on top of the 65% cumulative impact.

"Please, in two or three clear pages that all of us in the public can understand, explain the 65% increase of p.m. peak traffic by the type of demand that will be put, how much that's going to mean on the bridges, how much that's going to mean on Lombard St., how much that's going to mean on 101, how much that's going to mean on Muni, on SamTrans, on Golden Gate, on AC, on SP-CalTrans. Please tell us, mode by mode. People walking on the streets; bicycling is, I guess, not something we're even measuring. Tell us what 65% cumulative means, because that's what you have approved, that's what these EIRs say.

"The projects you have approved and the ones you are going to be considering in the next couple of weeks is a 65% increase in p.m. peak traffic in 1984-1985. How are we going to accommodate it, and then add in the 72% factor of the 90 New Montgomery. So have two charts: one 65% and one 72% added to 65%. I guess that would be 100% increase or something like that. Tell us where we're going to get the transit capacity, tell us where they are going to get the money, tell us where we're going to get the bridges, tell us how many people on Lombard St. are going to love to have Lombard St. widened, tell us how many extra decks are going to have to be added on what bridges, what southern crossings, how we're going to get people to take the ferry boats when they don't want to take them, and tell us how people are going to survive in the region with that kind of demand, without the money.

"Unless your EIR magically comes up with this, do us the worst case analysis that CEQA requires, based on that information that you already have in two EIRs. I would love to see you tell me how we are going to increase traffic capacity in peak periods for 100% within two and a half years. That's your responsibility, I think, under the law. That's what your EIRs tell you the capacity problems are going to be.

"It is difficult to understand and break out the information for each aspect dealing with description of current (AS OF WHAT DATE) conditions, conditions that would be incurred when all projects under construction and approved come on line and the conditions that would be incurred with projects currently in the proposal stage. Please specify all of those aspects, and include in the cumulative impact with proposals all of the proposals I have listed, which total 55 million sq. ft. (including the Mission Bay project). This is especially important for analysis of streets near freeway entrances/exits or which lead to them (Bush is one such street as is Kearny) and for bridge, highway and transit capacity.

"Please explain City policy with regard to deteriorating levels of intersection volume. Is it consistent to head toward level F everywhere? So what are we going to do about it? What if cumulative development is 35 million or 55 million new sq. ft.? What impact?

"I have asked for evaluation of the impacts on Highway 101. ... I have received a copy of the MTC memorandum on Travel Impacts of Proposed Development on the Peninsula Along Route 101 (9/9/82). Please analyze the material in that report and factor the cumulative impact of the 38 projects therein on the ability to move additional downtown workers through that corridor and into San Francisco. Among the information in that study: mitigation measures which include widening 101 are not likely, 'encourage ridesharing' not measurable in terms of effect; proposed projects or under

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construction equal 20,000,000 sq. ft. of retail, industrial, office space, 6,000 new hotel rooms, 7,500 new housing units; Route 101 is at or near capacity southbound from 4:00 to 5:00, already near capacity northbound 7:00 - 9:00 a.m.; p.m. commute hours at level F, E, D for much of area; planned and under construction projects would increase peak hour trips 25% (this does not include trips related to downtown San Francisco development).

"Please factor [the information in the MTC study] into traffic ... analyses. What additional implications does this report have for San Francisco? Can we expect to move people into the City from San Mateo? If not will commute patterns shift from East Bay and North Bay - areas accessible only by bridges (and to a miniscule extent water). Where do we put the next bridge? Will San Francisco have to extend 280 to accommodate peninsula residents who come up 280 instead of 101? What pressures on Mission St. and other San Francisco surface roads as people try to avoid jams on 101?"

"San Francisco Chronicle, October 7, 1982, pp. 7 and 8, The Projects Taking Shape Along the Bay. Cites incredible traffic congestion, capacity and air quality problems resulting from development along Highway 101 in San Francisco, San Mateo and Santa Clara counties. Twenty million sq. ft. of commercial space. Implications include possibly filling the Bay or widening 101. This needs to be included in the analysis of cumulative impacts of San Francisco development because of the role of that corridor in moving people into downtown San Francisco and of the limiting of capacity that might be occurring." (Sue Hestor)

"I would comment that there is a significant impact [on transportation], in that you would need to consider as well as the projects in San Francisco those projects identified in the ABAG/BCDC report on the Peninsula, and the City of Oakland DEIRs for the Kaiser Center project, in particular -- as part of the cumulative impacts. I want to enter those two reports by reference, which I think CEQA permits me to do. ... You take that, all together, I think it's clearly cumulative impact." (John Elberling)

"We should have discussion of cumulative effect of Oakland, San Mateo, Contra Costa and Marin on ... transportation, since they are mentioned earlier in the EIR. It seems to me that the time has come to really take the regional look at what the Bridge is going to be faced with, what the bridges are going to be faced with, how we're going to solve the problems." (Susan Bierman)

RESPONSE

Table 6, p. 74, shows a p.m. peak hour increase of 48,000 person trip ends which is comparable to the increase calculated based on a gross estimate of employee travel. The calculation used to arrive at the values shown in Table 7 is based on more rigorous data than is the calculation cited in the comment. The basis of the 82.5% figure is not statistically valid when applied to the entire downtown. The calculations presented in the 90 New Montgomery EIR are a description of a scenario based on one set of assumptions. The 72% increase (125 to 215) reported in the Draft 90 New Montgomery EIR was an estimation of the shift from autos to transit because of the lack of parking, congestion and other factors. The 580 California EIR does not attempt to quantify this shift. The cumulative scenario presented in this EIR is based on a more refined set of assumptions. Alternatively, the employment trend scenario (see Appendix F, p. 280) is based on a third set of assumptions.

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As discussed in the text, the total 16.1 million sq. ft. of office space and the 0.5 million sq. ft. of retail space is used as the basis for "cumulative" development in Tables 6, 7 and 8 and Tables F-2 and F-5. To develop an "existing" set of values for comparison to Table 6, an estimate of the amount of existing travel generated by the entire downtown area would have to be made. All of the "existing" data in Tables 7 and 8 include non-downtown travel. As noted in Table B-1, p. 245, 53.3 million sq. ft. of office space currently exists in the downtown, which (at 250 sq. ft. per employee) would represent about 213,000 employees. The 16.1 million sq. ft. of cumulative office development with about 64,000 employees would represent an increase of about 30% over existing levels, not 65% or 72%. A list of projects considered in the cumulative analysis, including floor areas, is on pp. 134-136 of this document.

The date of the existing parking data is given on p. 40, note /8/. Table 7 on p. 77 has been amended to add "(1982) +" under the word "Existing" in the first column. The footnote "+" has been added, reading: "Ridership counts: BART, March 1982; AC Transit, composite of weekdays, May 24 and 27, June 3, 6 and 7, 1982; Golden Gate Transit, June 14, 1982; SamTrans, February 1982; Southern Pacific-Caltrans, February 25, 1982. The footnote "****" has been modified to read: "1982 Muni ridership is approximate, based on a compilation of Muni ridership by Department of City Planning staff. Muni data are the average of the three most recent schedule checks (observations) made by Muni for each route between August 1981 and August 1982." The date of the intersection count is given in note /7/, p. 40. Table 8, p. 80, has been amended to add "(1982) +" after the word "Existing" and to move the misplaced "(AM)" to follow "Washington/Battery". The footnote "+" has been added, reading "Intersection counts made Thursday, February 28, 1980 and Tuesday, July 21, 1981 by TJKM transportation consultants." The title of Table F-2 (now Table 7a, p. 77a of this document) has been revised to read:

"Existing and Projected Muni Load Factors* (PM Peak Hour -- Peak Direction)."

The footnote has been expanded so that the penultimate sentence reads:

"The future load factors have been calculated using existing capacity and do not include any proposed capacity increases."

The following is added as the last sentence of the footnote:

"Ridership is the average of the three most recent schedule checks for each route for the months of August 1981 to August 1982, as compiled by the Department of City Planning."

As discussed in the traffic impact section and in Appendix F, travel assignment is based on existing patterns. Transportation analysis methodology does not assume any redistribution of traffic due to congestion or lack of parking, since redistribution cannot be accurately predicted. Based on existing levels of auto use, cumulative office and retail development would increase traffic congestion. City policy is to maintain a workable street system, essentially forcing redistribution. No proposals currently exist to improve intersections projected for Level of Service F since the intersections are currently operating at acceptable levels. Intersections analyzed under cumulative development of 16.1 million sq. ft. of office and 0.5 million sq. ft. of retail in the EIR (Table 8, p. 80) would have levels of service "C" or better, which is characterized as acceptable.

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The cumulative impact analysis is based on projects that are under construction, approved, or under formal review at the time of analysis. The Mission Bay area is currently the subject of a planning and feasibility study in which seven alternatives are under consideration. No project approvals have been applied for as the amount and type of development has not been determined for the area. Inclusion of Mission Bay in the cumulative development analysis would result in adding a general concept to a list of specific projects, and therefore it is not included in the cumulative analysis.

The joint Metropolitan Transportation Commission/Bay Conservation and Development Commission (MTC/BCDC) report on employment growth in the Bayshore (US 101) corridor, cited in the comment, contains an analysis of development which could generate about 62,000 peak hour person trip ends (Draft Report, Travel Impacts of Proposed Development on the Peninsula Along Route 101, MTC/BCDC, September 17, 1982). The report states that about 10% of the trips would be from (or to) residential uses which could be construed as being already counted by the projections in this EIR. Further, the report states that only 20% of the development would use the 101 freeway north of Millbrae. Once transit use is accounted for, the number of vehicle trips is about 9,000 peak hour vehicle trip-ends. The report is based on existing vehicle use and occupancy patterns continuing into the future unchanged (the report assumes a 6% transit usage). Thus, the analysis is not sufficient to project actual future demand on the Bayshore, but rather is intended to identify that a change in future travel patterns would need to be made to allow all of the development to take place.

The EIR discusses the impact of increases in commuter trips into San Francisco as a result of downtown office development. Developments in Oakland, San Mateo, Contra Costa and Marin would generally have little effect on bridge traffic into San Francisco (except that traffic into Oakland from East Bay cities north and south of Oakland would use the same thoroughfares as traffic from those directions moving into the City). To the extent that developments in these counties attracted residents of San Francisco, bridge traffic in the contra commute directions would be increased. Roadways (including bridges) operating in contra-commute directions generally have greater unused capacity than those leading into San Francisco during commute hours; development affecting these roadways would not contribute to cumulative transportation impacts as described in the EIR. See also the response to the comment under the subheading "Regional Office Market and Effects", p. 158 of the Employment, Housing and Fiscal Factors section of this Summary of Comments and Responses document.

ADDITIONAL BRIDGES AND STREET UNDERPASSES

COMMENT

"I'm sure a lot of people are here because they are against highrises, but that's a foolish policy. I hear all this talk about numbers, about cars coming over. Look, there is a huge Bay out there. We can build all the suspension bridges we need. You can profit as a private entrepreneur operating a suspension bridge. Traffic problems. There is no traffic problem. You just underpass Market; you underpass Van Ness. There's all kinds of room for traffic improvement. That isn't your department." (Randy Ritchie)

VIII. Summary of Comments and Responses

RESPONSE

The feasibility of providing additional suspension bridges over the Bay without definite proposals for such bridges is unknown and including such potential bridges in the transportation analysis is beyond the scope of the EIR. The BART system runs under Market St. and additional underpassing would probably be financially infeasible (and unjustified in comparison to benefits) given current technology. A similar system underpassing Van Ness has not been proposed and cannot be included in the assessment of traffic impacts. Such a system could be hampered by the existence of the Muni Metro subway system crossing beneath Van Ness Ave. and Market St.

IMPACTS OF CUMULATIVE DEVELOPMENT - TRANSIT

COMMENT

"P. 79 et seq. [of the Kaiser Center EIR, EE81.71, City of Oakland] details problems with AC capacity and expansion. This information needs to be incorporated into SF EIRs along with information on demands that may be placed by East Bay development which may adversely impact ability of AC to move people into San Francisco. Page 82 et seq. - BART problems which will arise if cumulative development levels occur in East Bay. BART will be over capacity virtually throughout entire system. How would the juggling needed to accommodate East Bay affect the ability to juggle that same capacity to meet demands being placed by San Francisco?" (Sue Hestor)

"Each transit district has policies regarding the loading factors it believes are tolerable because of comfort, safety, scheduling, etc. For instance, while Muni assumes standing is acceptable, AC Transit may allow less standees as a matter of policy, and Golden Gate Transit (with longer runs and narrow aisles) may allow no standees. Table 7 on p. 77 shows the loading factors for each Bay Area transit system serving San Francisco and indicates a range of loadings depending on capacity increases. ... What is the loading factor for each transit system which is consistent with that system's transit policy? That is, what is the Muni's recommended loading capacity which it believes is its target goal to reach? What is the target loading capacity goal of each transit system? Does Muni have a goal or policy that all vehicles should have a loading factor of 1.0 or less? ... What load factors do the five-year plans for each transit district assume will be attained?

"Will planned development in Alameda and Contra Costa Counties utilize BART and AC Transit capacity which this EIR has assumed is available to accommodate the demand generated in San Francisco? Will planned Oakland development assume that the capacity in BART from Fremont to Oakland will utilize excess BART capacity at the same time San Francisco assumes this capacity will go to Fremont-to-San-Francisco commuters? How much development is currently planned in Oakland?

"On p. 82 of the DEIR it states that the deficit of 11,500 parking spaces will require increased transit use by the occupants of 11,500 automobiles, thus the percent of transit use in the future will be higher than in the present. Did the transit analysis on pp. 75-77, Table 7 and Table 7a assume this higher percentage of transit use? If so, what percent transit use exists right now, and what percent is assumed in the future?" (David Jones)

RESPONSE

The analysis in the Kaiser Center EIR is similar to the analysis used in this EIR in that only development in the project area is analyzed. In this EIR downtown San Francisco development is treated as cumulative and in the Oakland EIRs Oakland Central District development in that area is similarly treated as cumulative.

The ability of AC Transit to provide service to downtown San Francisco would be affected by development in the Oakland Central District only to the extent that AC might divert vehicles currently used on the transbay lines for use on downtown Oakland lines, rather than increase its capacity to serve both areas. This is because the AC transbay routes are express and semi-express routes that link East Bay residential areas with the Transbay Terminal in downtown San Francisco rather than with the Oakland Central District. This EIR has not assumed any increase in AC Transit transbay service nor has it assumed any decrease.

The ability of BART to provide Transbay service is affected by development in the Oakland Central District as riders coming into Central Oakland from east of the Berkeley hills must use the same trains as San Francisco riders. (Riders on the Richmond and Fremont lines have service provided on routes which are separate from the San Francisco service.) Analysis of the cumulative peak-hour BART demand on the three BART lines serving downtown San Francisco, caused by Central Oakland development (as reported in the Kaiser Center EIR) and from downtown San Francisco development, is shown in Table B, below. On p. 32, 1st para., the EIR states, "... approximately 6.0 million sq. ft. of office space in nine new buildings are currently proposed for construction in the City of Oakland over the next 10 years."

TABLE B: BART LOAD FACTORS, EXISTING AND PROJECTED

<u>Cordon Point</u>	(1982) <u>Existing Load Factor*</u>	<u>Existing + Cumulative Load Factor**</u>
Transbay from Embarcadero		
Concord - Daly City	1.33	1.24
Richmond - Daly City	1.32	1.23
Fremont - Daly City	1.40	1.30
Northbound from MacArthur		
Concord - Daly City	1.36	1.69
Richmond - Daly City	1.22	1.44
Southbound from Lake Merritt		
Fremont - Daly City	1.36	1.29

* Load factor based on existing (1982) seated capacity (72/car) as is done in the Kaiser Center EIR. Table 7, p. 77 of the EIR, bases the load factor on seated plus recommended standing capacity.

** Load factor based upon projected seated capacity from BART 5-year plan and on cumulative development in both San Francisco and Oakland.

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BART attempts to maintain a seated load factor of 1.30, i.e., 30% standees, but crush loading on a BART train is in the 1.70-2.00 seated load factor range. With the load factors projected above, BART plans for improvements to its system would enable BART to serve both the Central Oakland cumulative development and the downtown San Francisco cumulative development at the capacity levels projected for 1987.

As stated in Table 7, p. 77, in the first footnote, a load factor of 1.00 is equivalent to 100% of recommended seated and standing capacity for each transit agency. Recommended capacity differs for different types of vehicles and is defined differently by each transit agency. In all Bay Area transit systems, recommended capacity is less than actual physical capacity of transit vehicles ("crush loads"). Table C, following, shows how many standees are included in load factors of 1.00 on each transit agency's vehicles.

TABLE C: NUMBER OF STANDEES INCLUDED IN LOAD FACTORS OF BAY AREA TRANSIT SYSTEMS

<u>Agency</u>	<u>Vehicle</u>	<u>Maximum Seats</u>	<u>Recommended Standees</u>	<u>Recommended Total</u>
Muni	Motor Coach (Average)	45	23	68
	Trolley Coach	50	25	75
	LRV	68	82	150
BART	All	72	36	108
AC Transit	Motor Coach (Average)	48	12	60
SamTrans	Motor Coach (Average)	47	12	59
Southern Pacific	Suburban Car	100	0	100
	Gallery Car	150	0	150
Golden Gate Transit	Motor Coach	45	10	55
	Sausalito Ferry	400	175	575
	Larkspur Ferry	510	240	750

SOURCE: The information contained in this table is taken from the five-year plans of each transit agency.

The transit analysis (and the transportation analysis as a whole) is based on existing travel distribution patterns, and does not attempt to predict a change in the percent of transit use as a result of a parking deficit. Changes to the distribution as a result of cumulative development cannot be accurately predicted. The EIR acknowledges the potential increase in transit ridership on p. 82, last paragraph, but quantification is not possible. Section 15140(h) of CEQA Guidelines states that, "If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

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Travel modes by residence of employee are shown in Table F-1, p. 281 of the Draft EIR, and varies by place of residence and transit services available. The percent of existing transit use attributable to downtown office development is not known; to develop an "existing" set of values, an estimate of the amount of existing transit use generated by the entire downtown area would have to be made. All of the "existing" data in Table 7 include non-downtown travel.

IMPACTS ON MUNI

COMMENT

"At what point is the Muni so overcrowded that people stop taking it?" (Sue Hestor)

"P. 167. J, K, L, M and N lines are shown at 0.96 and 0.84 respectively, meaning that they are not jammed, they are not at 150% of seated capacity. If you will look at the Muni pictures of the peak hour, N and L are jammed. Inbound K, J and M are jammed in the morning. And the p.m. is heavier. I don't think we're getting a true picture of the existing problem in these tables, let alone the future problem. To me, these tables still don't tell the story. 1.46 or 1.37 means we have 150% capacity of a vehicle, plus whatever that 0.36 or 0.47 means. And it means abysmal discomfort to people who are going to have to travel. This EIR — this one or 90 New Montgomery — says passengers will be uncomfortable, they will experience discomfort. And I think we ought to have tables that really show that clearly. P. 77. Appendix, p. 167 should appear in the main body in this section of the EIR. P. 77 gives too optimistic a view, and p. 167 table will be clearer." (Susan Bierman)

RESPONSE

The EIR can identify projected Muni and other transit service load factors based on the set of assumptions contained in the analysis (i.e., that all of the development projected will take place as proposed, that no increases in capacity will occur or that planned expansions/service adjustments as contained in the five-year plan will occur, and that modal splits will not vary from the present). The EIR cannot identify decisions of individual passengers which would be made based on Muni loading conditions.

The load factor on the metro lines (J, K, L, M, N) has been calculated based upon 220% of seated capacity (i.e., 68 seats and 82 standees for a total capacity of 150 riders; this is the capacity Muni identifies for LRVs as shown in the preceding table, Table C). The existing load factors and ridership shown in Table 7a were compiled by the OER from Muni load checks. The load factors are an average of the three most recent schedule checks for each Muni route and represent the best available data.

Thus, a load factor of 0.96 for the K, L, M, and N lines means that averaged over the peak hour, only 4% of the total capacity of the lines was available. On a per-car basis this corresponds to 6 persons per LRV. For Muni an additional 0.36 load factor would represent an additional 24 standees on motor coaches, 27 on trolleys and 54 on LRV's. In most cases, existing Muni vehicles would not be able to accommodate all of the demand represented by the additional 0.36 load factor.

The projected load factors cited, based on 16.1 million sq. ft. of cumulative office development and 0.5 million sq. ft. of cumulative retail development, of 1.46 and

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1.37, are based upon existing (1982) capacity. Table 7 also shows load factors based upon proposed capacity. Muni load factors for proposed capacity for the future conditions are 1.13 for both existing plus cumulative and for existing plus cumulative plus the project. The 1.13 factor is an average; specific projections by line are given in Table 7a, p. 77a of the EIR. An additional 0.13 load factor represents about 9 additional standees on an average Muni motor coach which may be accommodated in a "crush load" condition. (Muni schedule checks show individual motor coach loadings as high as 1.34 times the recommended capacity, which would be about 90 persons on a motor coach.)

The following is added to the 1st note in Table 7, p. 77 of the EIR:

The load factors shown for Muni are averages of projected load factors for all lines. See Table 7a, p. 77a, for projected load factors for individual lines.

Table F-2, on p. 167, Appendix F of the Draft EIR, has been moved to p. 77a of the EIR and is now called Table 7a.

FERRY SYSTEM EXPANSION

COMMENT

"P. 76. Explain expansion of the ferry system, adding on ferry. I don't know who has proposed it, I don't know who is going to approve it, and I don't know where they are going to get the money. I really want our staff -- if the consultants don't do it, I want our staff to talk to somebody at the Bridge to find out what that is all about. Because Marin County is one of the bad problems in these EIRs. The Bridge is full. Environmentalists and a lot of other people don't want a second deck on the Bridge. And the ferries are an answer, I think, but I have not heard breath one that that's the direction they are taking." (Susan Bierman)

RESPONSE

The third ferry is already purchased; expenditures for the expansion in service described on p. 76 of the EIR would not be required. Expenditures would be required for additional operating costs, however. The proposal for future ferry service improvements involves converting all three Larkspur ferry boats from gas turbine to diesel engines and using all three ferries on the Larkspur/San Francisco route. The district would be adding an additional ferry boat to the two it now has in operation but would not have to purchase an additional ferry boat to do this as it currently has one ferry in reserve. This information was provided by Alan Zahradnik of Golden Gate Transit on August 19, 1982 and is discussed in the "Five Year Transit Development Plan" (1982-1987) for the Golden Gate Transportation District.

RIDESHARING

COMMENT

"What is your basis for concluding that people would start sharing rides? What studies? There are already incentives for that in express lanes? What success? What if they don't?" (Sue Hestor)

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RESPONSE

The statement on p. 82 mentions two possible alternative scenarios to single-occupant automobile commuting that may occur as the result of the projected increases in downtown employment, unless freeway and parking capacity were to be expanded significantly.

An example of increased vehicle occupancy during peak hours can be seen at the Bay Bridge Toll Plaza where in March 1975 free lanes were introduced for carpool vehicles. In the spring of 1977, vehicle occupancies in the carpool lanes during the 6:30 a.m. to 9:00 a.m. commute period averaged 3.52 persons per vehicle while the other lanes averaged 1.21 persons per vehicle. Average occupancy over all the lanes was 1.53 persons per vehicle (this is because there were more vehicles in the non-carpool lanes). In the fall of 1980, the carpool lane vehicle occupancy had increased to 4.0 per vehicle while the non-carpool lane occupancy had increased to 1.26 persons per vehicle. Overall vehicle occupancy increased to 1.9 persons per vehicle, which indicates a proportionately greater increase in use of the carpool lanes. (Traffic Survey Series A-48 and MA-55, University of California, 1978 and MTC, 1980.)

A third alternative scenario, a shift of employment out of the City, could result if transportation capacity is not available and commuters are unwilling to alter travel patterns to make use of higher vehicle occupancies or transit.

EXISTING PARKING SPACES

COMMENT

"I couldn't find anywhere where it said how many parking spaces there were existing in the present building." (Norman Karasick)

RESPONSE

The following has been added to p. 20, para. 1, 2nd sentence:

"... and a subsurface parking level, with 24 parking spaces."

Please see the response to the following comment for the revisions to the EIR based on this information.

PARKING DEMAND AND DEFICIT

COMMENT

"[O]n p. 81 it says that there is a created demand for 250 long-term spaces and 30 short-term spaces, an on-site deficit of 245 spaces. And then on [p.] 104, the numbers change slightly and say 340 long-term spaces, 65 short-term spaces, and a deficit of 370 spaces. I just would like to know which is correct." (Norman Karasick)

RESPONSE

The information on p. 81 of the EIR is correct. P. 104, 2nd para., has been corrected to read:

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The project would provide about 35 long-term valet parking spaces and would generate a demand for about 250 long-term and 30 short-term spaces.

PROVISION OF PARKING AND CITY POLICIES

COMMENT

"The Draft EIR does not sufficiently justify construction of an on-site parking facility which is inconsistent with the City's Comprehensive Plan. The proposed project building plan includes a subsurface parking level which would extend below City sidewalks and provide valet parking for 35 vehicles. The provision of on-site parking is inconsistent with both the Transportation Element of the City's Comprehensive Plan and GDD which discourage new parking in the downtown core automobile control zone.

"Current city policy, as articulated in the Transportation Element, is to 'discourage the addition of long-term parking spaces in and around downtown, limit the amount of new spaces to that which cannot reasonably be accommodated by transit and locate long-term parking facilities in areas peripheral to the downtown commercial district.' GDD guidelines do not provide for the addition of new long-term and short-term parking facilities in the downtown area.

"The draft EIR gives scant justification for the non-conformance with explicit City Policy on parking, offering by way of explanation only that: 'All parking spaces are considered necessary to the building's marketability.' (Draft EIR, p. 101, emphasis added.) No fiscal analysis is provided to support the conclusion of the parking lot's necessity. The decision to include parking should be reassessed and rejected in light of the ... associated hazards." (San Franciscans for Reasonable Growth)

"Parking - just because something is City Policy doesn't immunize it under CEQA from having to be dealt with. Explain environmental impact of removing short-term parking from downtown core area." (Sue Hestor)

"I mean take parking. For a while the Planning Commission here was totally against parking. You were all against parking, no underground parking. Why not put underground parking there, for example? I mean, you have changed your advice like the wind." (Randy Ritchie)

RESPONSE

As noted in the comment, Policy 3 of the Downtown Parking Plan of the Transportation Element would "limit the amount of new spaces in and around Downtown which could not reasonably be accommodated by transit." It would not be reasonable to assume that transit could accommodate all new trips generated by the project; the provision of 35 spaces would therefore not be inconsistent with this policy. The prohibition of parking proposed for the Downtown in GDD has not been officially adopted by the City. The project would not conflict with Section 204.5(c) of the City Planning Code which governs the amount of accessory parking space permitted in districts where parking is not required.

The EIR does not state that the proposed parking is required to ensure financial feasibility of the project and therefore a fiscal analysis is not necessary. The sentence referred to on p. 101 was a reason for rejection of space for storage

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containers for recyclable materials. This measure is now proposed as part of the project and the sentence has been deleted. (See the response to the comment under the subheading "Recycling Containers, p. 200 of this document.)

A discussion of project and cumulative development impacts on parking is included in the EIR on pp. 80-82. The parking deficit is listed on p. 104 of the EIR as a significant environmental effect that cannot be avoided if the project is implemented.

The 24 parking spaces in the existing Fireman's Fund Building are not short-term spaces; they are used by tenants of the building on a long-term (more than 6 hours) basis (James Buie, Jr., Gerald D. Hines Interests, telephone communication, December 20, 1982). The project proposes about 35 underground on-site parking spaces, a net increase of about 10 spaces in on-site parking. The amount of parking proposed will be reviewed by the City Planning Commission in its Discretionary Review of the project.

LOADING AND PARKING ACCESS AND PEDESTRIAN HAZARDS

COMMENT

"The inclusion of parking -- in addition to constituting non-compliance with City policy -- will be a potential cause of pedestrian/vehicle conflict. The entrance to the subsurface garage will consist of a curb cut at Spring St. Spring St. is extremely narrow (14 ft. curb-to-curb width) and the sidewalk is traversed by pedestrians. The pedestrian hazard and the congestion generated by the garage will be exacerbated by the use of Spring St for access to the project's loading docks. Large trucks will be using California St. for access to Spring St., which will result in additional traffic congestion and danger to pedestrians. ... [T]he project's parking garage in conjunction with loading docks will cause a severe pedestrian/traffic problem on California and Spring Sts. (San Franciscans for Reasonable Growth)

RESPONSE

Pedestrian vehicle conflicts from loading and parking access on Spring St. are discussed on p. 78 of the EIR. The last sentence of the 4th paragraph on p. 78 states: "Peak-hour pedestrian traffic on the California St. sidewalk crosses Spring St. at a rate of 10 to 15 pedestrians per minute; there would be momentary delays for some pedestrians caused by vehicular traffic to and from the parking facility."

The 5th paragraph states: "Spring St. is not used heavily by pedestrians. At present, about 100 to 150 persons use the narrow (four-ft.) sidewalks on Spring St. during the peak noon and p.m. hours. Vehicles accessing the loading docks and underground garage entrance to the project on Spring St. would cause momentary interruptions of sidewalk traffic on the west side of Spring St. There would be about eight service vehicles or trucks per hour during the day stopping at the loading docks. Blockage of the sidewalk by the cab of a docked truck would seldom occur, as the loading space would be recessed about 35 ft. from the sidewalk, accommodating large single-unit trucks as well as smaller service vehicles."

The project would have about 10 more parking spaces than currently on the site. This amount of increase in parking on the site and the low level of pedestrian activity on Spring St. make it unlikely that severe pedestrian/vehicle impacts would result from the project.

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ADEQUACY OF MITIGATION MEASURES

COMMENT

"The draft EIR provides insufficient measures to mitigate transportation impacts. Downtown office development will have significant effects on traffic and mass transit systems. An analysis of the cumulative impacts of buildings which are, or have been formally under review, discloses substantial transportation-associated degradation. The following paragraphs address the project's impact on traffic at the Clay/Front Sts. and Washington/Battery Sts. intersections.

"Traffic at Clay/Front Sts. intersections will deteriorate from level of service A to C, while traffic at Washington/Battery Sts. will go from B to C. These levels have been defined by the San Francisco Department of Public Works as follows: Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.

"Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can be generally described as very good.

"Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.

"The only mitigation measures proposed to reduce or eliminate the increasing downtown vehicular congestion are encouragement of flex-time, construction of a bicycle parking area, and provision of a transportation broker to encourage the use of mass transit. The first measure will be able to accomplish very little, since peak hours of congestion cover a broad time range and flex-time will be ineffective in avoiding commuting during this peak time. The latter measure, provision of a transportation broker, is positive in substance, but it is questionable whether the mass system will be able to absorb this increasing ridership.

"As the draft EIR notes, the additional ridership from the projected 16.1 million gross sq. ft. of cumulative office development and 0.5 million gross sq. ft. of net new retail development will cause most Muni lines, BART transbay, Southern Pacific, and Sam Trans to exceed existing capacity. Even if expansion occurs, some systems will still be over capacity -- this includes Muni and Southern Pacific; while AC Transit would be operating at 99% of its recommended capacity.

"At least one study has concluded that the cumulative costs of providing services (including mass transit) may exceed the revenues generated. (Draft EIR, p. 70.) Because the mitigation measures will not adequately alleviate this transportation crunch, the EIR should more fully justify its rejection of Alternatives A, B and C which, respectively, would reduce traffic impact by 45%, 40% and 50%." (San Franciscans for Reasonable Growth)

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"I want to talk about flex time ... because it's in this report as a mitigation. What the report fails to note in the impact section is, of course, the peak is spreading, especially on a cumulative basis, and this project contributes whatever percentage to it it does. Spreading the peak just means rush hour gets longer. Flex time, I would agree with you, would be a mitigation if you were just building one building every few years, and it was just a matter of spreading those folks in their cars and their Muni trips and so on among a longer period of time. But, of course, when you are building 20 projects or however many you are for your analysis, and when you have the East Bay and the South Bay and so on, what's really going on on a cumulative basis, rush hour is getting longer and longer anyway, and all you are doing under the rubric of flex time is making it longer. I submit to you that in anybody's parlance a longer rush hour is a negative impact, not a mitigation.

"You know, it's about a one-hour rush hour downtown. A two-hour rush hour is not an improvement under anything you want to call it -- noise, air quality, visual impact, quality of life -- take your pick. I want to see that mitigation, flex time as mitigation, dropped out of this EIR. It's not. It's exacerbating the problem." (John Elberling)

"Please explain what impact each measure is mitigating, how much and why it is a mitigation, rather than merely a condition of development (i.e., things required as part of privilege of building anyway).

"What is an adequate rate of return? How do we tell whether additional mitigation is feasible economically without that information?

"How do you know there will be ANY mitigation from this [Ordinance 224-81, one-time transit impact fee] measure? Please quantify.

"[A] letter ... from Caltrans, dated May 22, 1981 ... is contained in the Final Citicorp EIR. The specific point that I would also like to stress is: 'The listed mitigation measures have not clearly been evaluated for their own environmental effects and there is no evaluation of the effectiveness of the measures to assure a reasonable service level or even to maintain the levels that now exist.' The other general comments also deserve response.

"I also incorporated by reference the resolution approving the 135 Main project - Res. 9357. As we are all well aware the Department has developed boiler plate language on mitigations and various findings. I hereby ask specifically that the Commission's findings on p. 2 that specific mitigation measures will mitigate significant effects on traffic and pedestrian use of adjoining streets, on transit use and transit and parking demand in the downtown area, and on housing demand. Please specify item by item what effects are being mitigated by each item, quantify the amount of mitigation and analyze the impacts of the mitigation measure on the environment.

"Is the effect of the transit broker - presuming it is successful in taking people out of their cars and onto transit or pools - factored already into the transportation analysis, or will the impacts be increased if this and every other transportation broker is successful?" (Sue Hestor)

"P. 99 and 100. Suggested transit mitigations -- that is, route changes, headway changes, additional buses -- have their own environmental impacts. Any of us that have sat through years of transit studies know that adding more buses, changing headways, can do drastic things to neighborhoods, also to the bridge, also to the approaches to the bridges. Please discuss these negative impacts on the City's neighborhoods, as well as the freeways and bridges and the approaches to those things." (Susan Bierman)

VIII. Summary of Comments and Responses

RESPONSE

The EIR acknowledges on p. 104, Section IV, Significant Environmental Effects that Cannot be Avoided if the Project is Implemented, 3rd para., last sentence, that "The project would contribute to cumulative traffic increases Downtown and cumulative increases in passenger loadings on BART, Muni and other transit agencies."

The EIR evaluates alternatives and provides the sponsor's reasons for rejection. The EIR does not reject the alternatives. Rejection of the alternatives by the sponsor as presented in the EIR does not preclude the City Planning Commission from selecting an alternative instead of the project. If an alternative were approved by the City Planning Commission instead of the project, the sponsor would then decide whether or not to build the alternative. The EIR is an informational document. Statements contained therein are to assist the decision-making body and are not binding on the actions of the decision-making body.

A discussion of mitigation measures not related to transportation follows this portion of the response, which deals with transportation-related measures.

The mitigation measure listed as the 3rd paragraph on p. 99 regarding the Transit Development Fee has been moved to p. 76 in Environmental Impacts, as the 3rd paragraph; if upheld the measure would be required and as such would not constitute a mitigation measure. Should a transit development fee or similar Muni funding program not be implemented by the Board of Supervisors, or be struck down by the courts, the measure would not provide financial assistance to Muni; therefore, the following has been added as the 3rd paragraph on p. 99:

Should Ordinance No. 224-81, which would require the sponsor to contribute funds for maintaining and augmenting transportation service in an amount proportionate to the demand created by the project, be declared invalid by the Courts, the project sponsor has agreed to participate in any subsequent equivalent mitigation measures adopted in lieu thereof, by the City, which will apply to all developments similarly situated.

On p. 66, last sentence of the 3rd para., the EIR states that, if the one-time fee is upheld, "the project could generate up to \$1.6 million in one-time fee revenues to Muni."

What a developer may consider an adequate rate of return may vary over time in a fluctuating market with varying degrees of risk. A sponsor's rejection of mitigation measures for economic reasons may be considered by the decision-making body in its review of the EIR, but does not constrain the imposition of measures by that body.

The CalTrans reference to mitigation measures in the One Sansome Building EIR, certified August 6, 1981, pertains to specific transportation mitigation measures in that report, such as the closing of Sansome St. which are not pertinent to or proposed for this project. No comment has been made by CalTrans on mitigation measures in this report. The general concern of the CalTrans comment is treated in the remainder of this response.

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None of the mitigation measures contained in the EIR are required by law, and would be imposed at the discretion of the City Planning Commission. Because of the level of accuracy contained in the analysis of impacts (that is, several assumptions are made which may or may not be true), it is not possible to quantify effects of mitigation measures on these impacts. In addition, the nature of some of the mitigation measures is such that the level of mitigation cannot be quantified and the State CEQA Guidelines do not require that mitigation measures be quantified. The Guidelines, Section 15140(h), state that: "If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

While flex-time would not contribute to a reduction in the number of vehicle trips to downtown San Francisco, it would spread these trips out over a longer period of time. Spreading the peak allows greater utilization of the capacity of the existing street and freeway system. Although peak-hour periods would be expanded, the levels of service on city streets and on freeways would be improved from the projected conditions.

The traffic mitigation measures suggested by the EIR (pp. 98-99 and those in Resolution No. 9357 for the 135 Main St. project) are all Transportation Systems Management (TSM) measures. The TSM measures identified are aimed at reducing peak-hour vehicle volumes by encouraging other modes of travel (such as mass transit as opposed to single occupant autos), greater vehicle occupancies, and travel at periods other than peak periods.

The effectiveness of the TSM incentive measures (providing bicycle facilities, vanpool/carpool information) depends upon the perceived convenience of each of these modes to each commuter from day to day. Perceived convenience includes factors such as cost, schedule flexibility, travel times and the proximity of the travel route end points to origins and destinations. Choices can vary greatly from traveler to traveler and from place to place; accurate regional projections of the effectiveness of increasing the attractiveness of some of these choices cannot be reliably made.

An employer's ability to implement staggered shifts or flextime depends on the size and nature of the firm. For example, small firms or service-sector firms would have less schedule flexibility than large firms or production-sector firms. For these reasons, any attempt to quantify the effectiveness of proposed TSM measures in removing vehicles from streets (and thus improving air quality) would be highly speculative and could be misleading. The State CEQA Guidelines, Section 15140(h), state that: "If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

The survey of employee travel patterns and drop-off and pick-up points would be used by the Department of City Planning staff to supplement existing information that the department uses in planning and decision-making processes. The transportation survey proposed as a mitigation measure could be used by the Department of City Planning and other concerned City departments (i.e., Public Works and Muni) to determine priorities for street improvement, bus routes and other transit-related improvements. CalTrans and downtown office project developers may also be interested in van and carpool information for use in transportation planning and project parking area allocation, respectively.

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The role of the transportation broker is to make information on alternative commute modes available and easily accessible. The effectiveness of a transportation broker would be constrained by the physical limits of the transportation system in that a broker could not force individual commuters onto transit lines in excess of capacity. However, within the overall population of single-occupant auto commuters is a sub-group of commuters that would use a higher-occupancy mode if they were made aware of the availability of alternative modes, or if the difficulty of trying to arrange alternative modes were to decrease. The effect of a transportation broker has not been included in the transportation analysis. Thus, any increase in carpool, vanpool, bicycle, or transit uses effected by the transportation broker would reduce traffic and air quality effects as reported in the EIR.

Local effects of route changes, headway changes and additional buses would be evaluated by individual transit agencies at the time any of these measures were specifically proposed for implementation. It is not possible to evaluate impacts until details of the changes are known.

The mitigation measure listed as the 6th para., p. 99 of the Draft EIR (5th para. of the EIR) would aid delivery persons and project users in locating their destinations within the proposed building.

Other mitigation measures contained in the report not related to transportation are discussed below.

The mitigation measure under Urban Design on p. 97 of the EIR would provide pedestrian amenities, both in terms of improving circulation and providing visual interest.

The mitigation measure under Employment, Housing and Fiscal Factors on p. 97 of the EIR would provide for low-income housing units to be constructed in San Francisco, planned in conformity with policies encouraging such development.

The two mitigation measures listed under Air Quality on p. 100 would help to lessen air pollution caused by construction of the proposed project.

The two mitigation measures listed under Construction Noise as the last two paragraphs on p. 100 would help to alleviate noise created by construction of the project by requiring the project contractor to muffle and shield tools, use electric-powered equipment instead of diesel-powered equipment, construct barriers around the site and around stationary equipment and locate stationary equipment in pit or excavated areas which would serve as noise barriers.

The mitigation measure listed as the 1st paragraph on p. 101 would commit the sponsor to include noise insulation features in the building design to reduce noise inside the building.

The four mitigation measures listed under Energy on p. 101 would commit the project sponsor to include energy-saving features in the design of the project, which would reduce the demand from the project on electricity and natural gas.

The two mitigation measures listed as the first two paragraphs on p. 102 of the EIR under Utilities and Public Services would ensure coordination between the project sponsor and the City's Office of Emergency Services in the planning of action programs to be carried out in emergency situations.

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The mitigation measure listed as the 3rd para. on p. 102 of the EIR would commit the project sponsor to include as part of the project the use of internal security personnel, alarm systems and maintaining well-lit entries in order to reduce demand on police protection services.

The mitigation measure listed as the 4th para. on p. 102 would commit the project sponsor to include low-flow fixtures in building facilities which would reduce water consumption and wastewater generation.

The six measures under Land on pp. 102 and 103 are means of reducing potential geologic and hydrologic impacts during construction and life of the building.

The measure under the heading "Cultural" on p. 103 would promote the preservation or recovery of archaeologic/historic artifacts should any be discovered during excavation for the project.

ADDITIONAL MITIGATION MEASURES NOT NOW INCLUDED IN THE EIR

COMMENT

"[C]onsider impact of absolute requirement of payment of money for additional Muni service, not merely a "maybe" contingent on litigation. "Add [the annual transit] assessment district [as a mitigation measure]." (Sue Hestor)

RESPONSE

The measure suggested would be beyond the scope of powers vested in the City Planning Commission, without the existing ordinance or a similar ordinance adopted by the Board of Supervisors.

The transit assessment district is not currently under consideration for implementation by the Board of Supervisors. Imposition of this measure without prior adoption of an ordinance by the Board of Supervisors is probably beyond the scope of powers vested in the City Planning Commission. The Ordinance, if upheld by the court, would be an absolute requirement of payment of fees. In any event, implementation of the suggested measure is a policy question which has been addressed by the Board of Supervisors previously and not implemented. The manner and method by which the City will raise funds for Muni must be addressed by the City, and is beyond the scope of the EIR.

See the mitigation measure on p. 192, 5th para., under the subheading "Adequacy of Mitigation Measures," in the Transportation section. This measure has been added to the EIR.

MITIGATION MEASURES FOR TRANSIT AGENCIES OTHER THAN MUNI

COMMENT

"Why is there no consultation with other regional transit agencies about mitigation for their capacity? Have they been consulted? When? With what results? Why not? AC Transit is having problems." (Sue Hestor)

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RESPONSE

The regional transit agencies have been consulted during the preparation of the EIR and the information obtained is reflected in the analysis contained in the EIR. As shown in Table 7, p. 77, and stated on p. 76, the proposed capacities would be adequate for the increased level of demand for all of the agencies proposing capacity increases. AC Transit and Southern Pacific are not proposing any capacity increases. MTC, as the regional administrator of UMTA and State TDA funds, will not allocate funds for AC to expand transbay services as the AC service is in direct competition with BART. A change in regional policy would be necessary to make feasible a mitigation measure that would increase AC Transit transbay capacity. Southern Pacific is not proposing a capacity increase as ridership has been steadily declining over the last 10 years. The travel demand projections have assumed that the existing percentage of commuters using SP would remain constant, which may be overstating the amount of future SP ridership based upon past trends. CalTrans, Muni, SamTrans and Santa Clara County transit have assumed the considerable SP operating deficit in hopes of revitalizing the peninsula rail commute. Current plans do not call for any capacity increases. If ridership increases in the future then capacity increases may be warranted and would be assumed to be addressed by CalTrans.

AIR QUALITY

LOCATION OF MEASUREMENTS

COMMENT

"P. 86. Measurements taken on Potrero Hill don't give accurate readings on California St. at Kearny. I still think we're misleading people about downtown, certainly the late afternoon peak hour congestion and what that kind of congestion does to the air quality."
(Susan Bierman)

RESPONSE

The concentration of carbon monoxide (CO) in the atmosphere at a particular location can be thought of as resulting from superposition of two components: a background concentration, reflecting the cumulative effects of distant sources of CO, and the local concentrations, indicative of the effects that local emission sources (particularly traffic) and meteorological conditions have on the total CO concentrations at a specific site.

The readings of CO concentration taken by the Bay Area Quality Management Districts (BAAQMD) at the monitoring station at 900 23rd St. provide information only on the city-wide CO background concentration. The BAAQMD readings are not used in EIRs to represent sidewalk-level concentrations on downtown streets. When EIRs are prepared for projects in downtown San Francisco, a local CO concentration, which reflects the contribution of local sources under worst-case meteorological conditions, is calculated, based on actual traffic counts at specific locations using BAAQMD-approved procedures. Since the total CO concentration near these sites is the sum of background and local concentrations, the total sidewalk-level concentrations can never be lower and is often significantly higher than the concentrations measured at 23rd St., as shown in Table 9, p. 85 of the EIR (compare ambient [background] concentrations to levels calculated for local streets).

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CALCULATION OF AIR QUALITY IMPACTS

COMMENT

"Air quality analysis - note use of vehicle miles traveled analysis [in Kaiser Center EIR, City of Oakland] to show impacts on air quality - something like that should be in this EIR. P. 105 - increase in VMT would delay attainment of air quality goals. Since commute distances into San Francisco are presumably greater than commute distances into Oakland, would not the VMT analysis make even greater for SF the delay in attainment?"

"In light of the information in [the MTC] study, which does not include cumulative development in San Francisco, it is clear that secondary source data would indicate major air quality problems in the Bay Area, which would be exacerbated by increases in commuters into San Francisco. Please factor that into air quality analyses." (Sue Hestor)

RESPONSE

The effects of new vehicle miles traveled (VMT) due to additional long distance commuting by employees of the project were factored into the air quality analysis contained in the EIR. If the project were moved to another site, commute patterns would probably be affected, but it cannot be stated conclusively that total VMT would be reduced. If the project were moved to Oakland, for example, contributions from commuters living in the East Bay to the total VMT would probably decrease but VMT contributions from commuters living in San Francisco, Marin and San Mateo would probably increase. Additionally, should the project be constructed in Oakland, a development similar to the project could still occur on the project site with effects similar to those reported in the EIR.

As noted in the response on p. 181, under the subheading "Impacts of Cumulative Development" in the Transportation section, the MTC/BCDC report states that only 20% of the development would use the 101 freeway north of Millbrae and, after accounting for transit use, the number of vehicle trips is about 9,000 peak hour vehicle trip ends. The analysis of regional impacts contained in the EIR is based on information contained in the 1982 Bay Area Air Quality Plan, prepared by the Association of Bay Area Governments (ABAG), MTC and the Bay Area Air Quality Management District. The Plan projects regional population, employment and land use trends. Despite projected regional increase in population, vehicle use and the density of development in urban areas, attainment of state and federal carbon monoxide and ozone standards is forecast for 1987, now that a motor vehicle inspection and maintenance program has been adopted by the State legislature. The projected regional air quality impacts include development in San Mateo County. See Table 10, p. 86 of the EIR for estimates of project and cumulative development impact on regional air quality.

MITIGATION

COMMENT

"The draft EIR does not discuss sufficient mitigation of project-related air pollution. The nine-county San Francisco Bay Area Air Basin is designated by the California Air Resources Board as a non-attainment area for ozone, carbon monoxide and total suspended particulates (TSP).

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"As the EIR notes, implementation of the project would add to local and regional accumulations of hydrocarbons, nitrogen oxides, carbon monoxide, particulates and sulfur oxides. Ninety-five percent of these emissions would be transportation related, while 5% would be associated with space and water-heating requirements.

"In analyzing projected 1987 emission concentrations, the draft EIR relies upon prospective auto-emission control measures; even with implementation of these measures, project-related emissions would impede the attainment of standards for hydrocarbons, carbon monoxide and particulates. Historically, however, emission control standards have rarely, if ever, been implemented as scheduled. Generally, compliance with standards has been postponed in response to industry lobbying, or standards have been weakened." (San Franciscans for Reasonable Growth)

RESPONSE

The emission projections contained in this EIR are not based on the assumption that additional emission control measures will be imposed in the future. California laws controlling emissions from new vehicles are not expected to change between now and 1987. The trend in emissions shown in the EIR reflects the effects of local and regional changes in the number, age and type of vehicles, not the effect of new emission control measures. If present controls on vehicular emissions are made less stringent in the future, local and regional air quality will be degraded.

ENERGY

ALTERNATIVE ENERGY SOURCES

COMMENT

"The draft EIR does not provide a basis for failure to implement alternative energy sources. When completed, the proposed project will consume about 3.5 million kilowatt hours (KWH) of electricity and 826,000 cubic ft. of natural gas per year. Cumulative increases in energy consumption in downtown San Francisco will increase electrical consumption by 260 million KWH and natural gas consumption by more than 403 million cubic ft.

"It is axiomatic that reduction of energy usage and lessening of dependency on conventional sources are integral components of our national energy strategy. Nonetheless, the draft EIR summarily dismisses incorporation of solar or other renewable energy sources into the project. The draft EIR does not adequately address the cost/benefit analysis which resulted in a decision to utilize conventional energy sources rather than solar or other renewable energy systems." (San Franciscans for Reasonable Growth)

RESPONSE

The use of solar energy (an alternative energy source) has been explored and rejected by the sponsor, because it has not been demonstrated to be cost effective (Thomas Owens, Gerald D. Hines Interests, telephone communication, November 19, 1982).

The primary energy requirement for high-rise office buildings in San Francisco is cooling. Mechanical equipment, lighting, and people produce heat which must be

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alleviated. Solar energy is mainly used to provide heat (air conditioning can be supplied by solar energy but the level of technological development is such that it is currently prohibitively expensive to do so). While it could be used to provide hot water, the amount of hot water used in a typical office building is not enough to justify the cost of including solar water heating equipment.

PG&E FACILITIES

COMMENT

"P. 41 gives warning of possibility of Wild and Scenic River Act precluding PG&E hydroelectric plants. It's a new act, and I think that if we're saying that, the EIR should also address the most recent Nuclear Regulatory Commission's report of health and environmental disaster potentials which could eventually preclude nuclear power plants. There was, last week and this week in the newspapers, of disastrous, I guess you would call them 'environmental' because God knows there won't be any environment. And I have for years now been trying to just point out that if PG&E has to keep on with nuclear to build our City, we better look at what those nuclear power plants really are and then make a judgment whether we really want to keep going the way we are going.

"P. 90. What does 'could be accommodated by PG&E facilities now and in the future' mean? I don't know what that sentence means. Does it mean existing facilities or planned facilities? I just think that sentence isn't clear." (Susan Bierman)

RESPONSE

The Nuclear Regulatory Commission's (NRC) recent report projected loss of life based on assumptions of the worst possible accident at a nuclear power plant and worst possible weather scenario for each of the 72 plants now operating in the U.S. The NRC projects that the prospects for such an accident are one in 10 million, assuming 100 power plants in operation (72 nuclear power plants are currently in operation). There is no doubt that any major accident involving a nuclear power plant would have severe impacts on human life and the environment because of the extremely hazardous nature and longevity of nuclear materials.

As stated on p. 90, PG&E had a surplus peak generating capacity of 4,500 megawatts (MW) and expects to have a surplus of 4,200 MW in 1985. PG&E anticipates about 2,200 MW of peak generating capacity from the Diablo Canyon nuclear power plant in 1985. PG&E would be able to serve the project and cumulative San Francisco development (about 312 MW peak demand) without Diablo Canyon; however, reserve margins would be about 13% instead of the projected 26%. PG&E plans no new nuclear power plants after Diablo Canyon.

PG&E would not need nuclear power plants to supply either current or future projected San Francisco demand for energy. The decision as to whether to use nuclear plants is an internal policy decision for PG&E and is beyond the scope of this EIR.

Future demand would be met primarily by coal, oil, natural gas and hydroelectric generators (PG&E, April 1, 1982, Future Generating Facilities and Changes to Existing Facilities).

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The statement that cumulative energy consumption due to new development in San Francisco could be accommodated by PG&E facilities now and in the future is based on projections of energy supply and demand, furnished to the State Public Utilities Commission by PG&E. Existing facilities could supply existing and cumulative San Francisco demand; however, new facilities will be phased in as old ones are phased out. New facilities are also planned by PG&E to increase future generating capacity and reserve margins; as noted earlier in the comment, the plans include no new nuclear power plants. The most recent projections extend through 2002.

COMMUNITY SERVICES

RECYCLING CONTAINERS

COMMENT

"The need for the parking lot is . . . used as a justification for the project's failure to provide recycling containers for office materials. 'Due to lack of space on the subsurface parking level, the project would not provide containers for collection of recyclable solid wastes (such as glass, metal, computer cards and newspaper).' (Draft EIR, p. 101.) The EIR does not indicate whether the absence of containers will result in disposal of these materials, or whether an alternative procedure will be implemented to facilitate recycling. If no alternative recycling measure is intended, the EIR should discuss the individual and cumulative implications of solid waste disposal and its associated municipal costs." (San Franciscans for Reasonable Growth)

RESPONSE

The sponsor has agreed to provide space for storage of recyclable materials. The measure referred to has been deleted. The following has been added as the 6th paragraph on p. 101:

"Containers for the storage of recyclable materials (such as glass, metal, computer cards and newspaper) would be located adjacent to loading docks on the ground floor of the building."

CHILD CARE

COMMENT

"There are a couple of questions, ... and they are my usual concerns with childcare and the need to assess the child care facilities that are available in San Francisco, the shortfall of facilities that are available for working parents at the present time, and the increased shortfall that will result from this new building." (Kay Pachtner)

RESPONSE

It is likely that some of the employees of the proposed project would have young children who would require child care. Because the tenant mix of the project is not known at the present, it is impossible to determine exactly what the demand for child care would be.

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Availability of and need for child care is a social issue which does not require coverage in environmental documents (Cal. Pub. Res. Code Sec. 21151 as amended by SB 803 and 21060.5). A detailed discussion of child care facilities in San Francisco can be found under Public Services in Responses to Comments on the 201 Spear St. Office Building EIR (EE80.377, certified May 20, 1982), available for public review at the Office of Environmental Review, 450 McAllister St., 5th Floor.

EMERGENCY RESPONSE CAPABILITIES

COMMENT

"What complications will arise in a major disaster during the daytime when all of the commuters are here? Can San Francisco move them out, accommodate them, what is our disaster plan for dealing with so many people?" (Sue Hestor)

RESPONSE

The California Division of Mines and Geology (CDMG) has recently published a scenario of potential damage to lifeline services, including transportation routes, utilities, marine and airports from a magnitude 8.3 earthquake on the northern portion of the San Andreas Fault (Davis, James F., John H. Bennett, Glenn A. Berchardt, et al., Earthquake Planning Scenario For a Magnitude 8.3 Earthquake on the San Andreas Fault in the San Francisco Bay Area, California Department of Conservation, Division of Mines and Geology, Special Publication 61, 1982). The study details damage to specific freeways, bridges, train routes, electricity and gas lines, water lines, airports and marine facilities, and makes conclusions about how long each specific "lifeline" link would be unusable. With regard to evacuating San Francisco, the study states that in the event of a major earthquake "... vehicular traffic into and out of the City of San Francisco and much of San Mateo County would be impossible for many hours until one or more corridors become available. Use of the Golden Gate, San Francisco - Oakland Bay, Richmond - San Rafael, and San Mateo bridges will be impossible for an extended period" (24 to over 72 hours). Even with corridors available for evacuation, a quick and smooth evacuation of San Francisco would be unlikely, because of the City's dense population, and geographic location at the end of a peninsula, which severely limits access to and egress from the City.

The CDMG study put forth a number of "planning insights" and recommendations for further study to aid local planners in developing emergency response plans for a major earthquake. The effectiveness of these plans depends, in part, upon the degree to which the various municipalities follow the State's recommendations in planning for such an event. It should be noted that San Francisco is severely limited in its ability to respond to a major earthquake by physical parameters that are not possible for planners to control or change.

This study does not specifically address damage to buildings, and does not address problems in specific areas of San Francisco. San Francisco has an emergency response plan specifically addressing the needs of the City on file at the City libraries. This plan identifies roles and responsibilities of government agencies that would be involved in the event of a City emergency. It includes listings of casualty and mass care centers that have been established on a district basis to provide first aid and essential social services to injured and displaced persons. This listing is periodically updated (Tom Jenkin, Architect, Mayor's Office of Emergency Services,

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telephone conversation, October 18, 1982). Evacuation plans have been developed for many downtown office buildings and such a plan would be developed for this structure.

Cumulative highrise development proposed for the downtown area would increase the total number of persons working downtown. This would result in a greater demand for medical and social services in the area if a disaster were to occur. In addition, street congestion would probably intensify due to the increased number of people concentrated in the Financial District. This would add to the difficulty of prompt response of emergency vehicles due to route delays and detours caused by crowded and blocked streets.

The effectiveness of the City's emergency response plan would depend, in part, on an informed public's knowledge of what to do and where to go in the event of an emergency. The project sponsor has agreed to a mitigation measure which addresses this impact (1st paragraph on p. 102, under the heading Utilities and Public Services, Measures Proposed As Part of the Project").

GROWTH INDUCEMENT

PRESSURES ON CHINATOWN

COMMENT

"[W]hat are the implications on the area to the west of Kearny St. by having so much [development] — not just the retail district. That is a very important anchoring corner for pressures on Chinatown. And your staff knows that there's some lots around California St. and Kearny St. that you are going to have proposals on, because it was one of the things that you did some boundary changes. It wasn't this project that you did a boundary change on the height limits around Chinatown at Kearny and California, but you know that there's some other developments coming through, that there's some 'underdeveloped lots.' So what kind of pressures are you putting on Chinatown — which in other hearings you throw up your hands in horror talking about the need to protect the housing stock, the commercial stock, and the general lifestyle of Chinatown. And you have enormous projects anchoring that very important approach to Chinatown. It really is Chinatown there. There are a lot of people that think Kearny and California is Chinatown. There is nothing in here that deals with the pressures you are putting on Chinatown in this EIR." (Sue Hestor)

RESPONSE

Several zoning changes have been initiated for a broad area north of Washington St. (two blocks north of the project block), where the C-3-O district ends. None of these areas would include the project site. That nearest the project site, beginning at Washington St. west of Columbus Ave. is a rezoning from C-2 to a high-density combined residential district (the rezoning has not been adopted). The Department of City Planning has recently begun a study on a potential rezoning of the Chinatown area (Chinatown Mixed Use Zone). The boundaries of this study have not been formalized, but are not expected to include the project site. This study is in a very early stage and no information has been officially released by the Planning Department. It is not possible to tell from the comment which rezoning is being referenced.

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The west side of Kearny St. is the dividing line between the C-3-O and C-3-G use districts in the vicinity of the project site (see Figure 10, p. 23 of the EIR) and the C-3-O and C-3-R use districts south of the project site; a greater supply of office space in the C-3-O district, in which office is the principal permitted use, results in reduced pressure to build outside of C-3-O in areas like Chinatown. As stated on p. 95 of the EIR, "Increased amounts of available office space in the Financial District would relieve pressure for construction of new office and conversion of existing uses to office space in other areas of the City".

The EIR concludes that "Development of the project ... would not itself stimulate further office development near the project site, as such development has already taken place or is being planned" (p. 95). Other development is in response to existing market stimuli which the project would partially alleviate.

Employees in the project would provide additional retail business for existing retail establishments in the project vicinity, including Chinatown, which could provide strengthening for the Chinatown retail sector.

PRESSURE ON HOUSING PRICES

COMMENT

"P. 95. There is a sentence at the top of the page, five or six lines down: 'Increased demand for housing would have a general tendency to increase City residential rents and housing sales prices, although the influence on future housing costs cannot be stated conclusively.' I guess it's all right to say that, but I can state it conclusively, and I don't think things ought to be put in that indicate softening of the problem. [S]upply and demand and the lack of possibilities for housing that we all are aware of — I just don't see why they couldn't have put a period after ... 'sales prices.' I think it's kind of a gratuitous extra comment." (Susan Bierman)

RESPONSE

The influence of increased demand on future housing prices (both rental and purchase) is characterized as inconclusive because the effect cannot be quantified. The sentence has been changed to read:

"... the influence on future housing costs cannot be quantified."

SIGNIFICANT IMPACTS

COMMENT

"If you don't make findings of significant housing and transportation impact -- I don't know how you can drop transportation and then make significant findings of pedestrian and vehicular traffic. That one is really weird, but that's what you did on 90 New Montgomery. I think parking belongs in here, is a significant impact. Housing and rental housing — and the housing is an environmental impact. If people can't find it within 75 miles and start commuting, there is an environmental impact on that. I mean, it's not silliness for me to say that housing has an environmental impact, because if it isn't there and people start commuting two hours a day, the air pollution goes up and the bridge capacity starts being stressed even more, and the transit patterns change as well." (Sue Hestor)

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"The net deficit of 11,500 parking places is a significant impact on the urban environment and effects transportation, traffic and air quality. CEQA requires the City to require mitigation for this impact. However, the City, as a matter of policy, is encouraging this adverse impact by specifically discouraging parking. The DEIR should be revised to note that CEQA requires mitigation of all adverse impacts even where cities do not wish to do so. San Francisco's policy not to worry about parking problems is superceded by CEQA's requirements to mitigate. This DEIR should require parking mitigation by making a finding that the cumulative impact of this and other office projects will have an adverse impact on parking in San Francisco." (David Jones)

"P. 104. Housing impacts cannot be avoided." (Susan Bierman)

RESPONSE

Transportation is a general category including specific subcategories of transportation-related topics: pedestrians, automobiles, loading and service vehicles, transit, circulation for all of the preceding categories and parking. In addition, impacts can occur at the local, district-wide, citywide and regional levels. A project may have impacts in none, some or all of the subcategories, and the level of impact may vary. A project by itself may not result in significant adverse impacts, but may do so as part of cumulative development. The EIR acknowledges (p. 104, 3rd para., Section VI) that transportation, including parking, traffic and transit, would be significant environmental effects that cannot be avoided if the project is implemented.

The deficit of available parking in the downtown is consistent with Comprehensive Plan policies (as well as proposals in Guiding Downtown Development). The Comprehensive Plan and GDD envision provision of parking in outlying districts, with the use of shuttles and transit to bring people into the downtown area. The Department of City Planning has identified areas appropriate for parking (largely under freeway overpasses in the south of Market, and also to the west of Van Ness Ave.).

An overall parking deficit is consistent with Comprehensive Plan policies to encourage the use of transit and carpooling to reduce congestion on streets, freeways and bridges. If downtown office buildings included large amounts of parking in an effort to meet some portion of the demand, the resulting traffic congestion would be precisely the effect Comprehensive Plan policies seek to avoid. For this reason, mitigation measures imposed by the City Planning Commission have, in the past, emphasized the maintenance and expansion of transit rather than provision of on-site parking.

While housing demand is discussed in the EIR, it is not considered a physical environmental condition as defined by CEQA, and thus cannot be included as a significant environmental effect. Even if it were a physical impact, it could be mitigated by the construction of housing units and so would not be listed as an impact "which cannot be avoided." The environmental effects related to commuting (air quality, traffic congestion, transit) are evaluated during the environmental review of proposed projects, on a individual project and cumulative basis, for all projects subject to environmental review. The EIR for the 580 California St. project contains discussion of each of these impacts in separate sections under the respective headings.

The project sponsor has agreed to provide low-income rental housing in San Francisco to partially satisfy the housing requirement which is a policy of the City Planning Commission. The remaining housing requirement would be met through contribution to the Shared Appreciation Mortgage Revenue Bond Program (see the measure beginning on p. 97, last paragraph, of the EIR).

VIII. Summary of Comments and Responses

ALTERNATIVES

NO-PROJECT ALTERNATIVE, ALTERNATIVES 2 AND 3, OUTSIDE SAN FRANCISCO ALTERNATIVE

COMMENT

"CEQA requires an objective analysis of no project alternative. Given the huge impacts of cumulative development, and the role of this project in that impact, the environmental advantages of not allowing this project, and other such similar projects, until the City and region can get a handle on how to provide the housing, transit, roadways, etc., to meet that demand and minimize those impacts, would seem to be considerable. Please explain the cumulative benefits to the environment of not incurring those environmental harms. This is also a comment on Alternatives 2 and 3. Project sponsor does not have the right to throw away the City's rights to delay this and similar projects until we are able to cope with the effects and the City is able to systematically and rationally absorb the amount of office space without having a glut on the market.

"... [A letter] from Bay Area Air Quality Management District, dated May 29, 1982 ... is contained in the Final Citicorp EIR and raises questions that are still relevant about various alternatives, including locations closer to where people work, to reduce air pollution. In light of plans in San Mateo, Oakland, other east and north bay locations, perhaps San Francisco needs to confront the issue of where development should occur in the region to minimize air quality, traffic and transit impacts. Isn't that what the EIR process is supposed to be about anyway? The questions raised in that letter should be addressed." (Sue Hestor)

RESPONSE

The EIR provides an analysis of the no project alternative on pp. 116-117. The City has issued a Negative Declaration on extension of the Interim Controls which allows development at the density represented by the project. The sponsor's rejections of Alternatives 2, 3 and 4 do not eliminate the "City's rights to delay this and similar projects." Under its powers of Discretionary Review, the City Planning Commission may approve any of the Alternatives presented in the EIR, based on the EIR and the Commission's determination of significant impacts, feasible mitigation measures, potential benefits to the City if the project were approved and other factors presented by the DCP staff, the public and the project sponsor. The project sponsor may then decide whether to build the approved design if it is other than the project proposed.

The project would comply with zoning controls presently in effect in San Francisco. The City has explored the possibility of development moratoriums, and a moratorium and stricter controls on downtown have been rejected by the San Francisco Board of Supervisors. The Planning Commission could disapprove the project but could not require that the sponsor build a project outside of San Francisco. The analysis of air quality impacts from the project and cumulative development indicates that effects would not be significant. If the project and other proposed projects included in the cumulative development analysis were not built, the effects of cumulative development that are identified and described in the EIR would not occur.

The letter referred to in the comment from the Bay Area Air Quality Management District concerning the One Sansome Building (Citicorp) contains the following statements.

VIII. Summary of Comments and Responses

We find the air quality analysis to be adequate -- as far as it goes, and perhaps, as far as can be expected for any single building proposal. ... The concern we have about air quality impacts would apply to any building in downtown San Francisco and especially, the cumulative impacts of the many current and proposed large traffic-generating projects there. This concern goes beyond the ability to control of any one developer. It may not be meaningful in regard to current and future overall downtown planning in San Francisco. Carbon monoxide emission is the principal local problem.

... We recognize that there are some positive air quality benefits to absorbing office building demand in a project of the design and location of the One Sansome Building. It is well served by Muni and BART transit. The lack of provision of parking at the building may further motivate workers and visitors to use transit -- thereby lessening reliance on the private automobile which would be more damaging to air quality.

Perhaps the question is one of city-wide and even regional balance. Absorption of office building demand in other places theoretically could reduce distances between home and work, and home and services, thereby reducing vehicular miles traveled and, consequently, emission of CO, as well as hydrocarbons and nitrogen oxides, the precursors of ozone.

Therefore we would like to recommend that future plans and projects be evaluated for their ability to approach or achieve minimum air quality degradation, relative to possible alternatives in intensity, design, services, and/or location.

The Bay Area Air Quality Management District has not commented on this EIR.

As noted in the BAAQMD letter cited by Ms. Hestor, the concern expressed "may be most meaningful in regard to current and future overall downtown planning." San Francisco is conducting a downtown planning study and Oakland is about to conduct a Central District planning study to update current plans in the context of changes which have occurred in the past decade and which are foreseen. Also reflecting change is the 1982 Bay Area Air Quality Plan which replaces the 1979 Air Quality Plan. The 1982 Air Quality Plan identifies three locales in the Bay Area where carbon monoxide is a problem and prescribes specific control strategies. The locations are Oakland, Vallejo and San Jose. San Francisco is not included as an area of special concern.

See also the response to the comment under the subheading "Calculation of Air Quality Impacts", p. 197 of the Air Quality section of this Summary of Comments and Responses document.

ALTERNATIVES IN THE DOWNTOWN EIR

COMMENT

"Table 4 compares this project to Guiding Downtown Development, only one of the 5 alternatives in the Downtown EIR. Please analyze this project against the other alternatives under study, and against the major mitigation measure of annual limits." (Sue Hestor)

VIII. Summary of Comments and Responses

RESPONSE

The Downtown EIR is in preparation and not yet published. Comparison of this project, or any specific project, with broad, areawide alternatives that concern rezoning on the entire C-3 districts and on which analyses have not been completed or published would be incomplete and/or inaccurate.

PARTIAL RETENTION OF FIREMAN'S FUND BUILDING ALTERNATIVE

COMMENT

"I don't know why everyone is so down on highrises. What should be done there is the building should be cut about one-third of the Kearny St. facade, and you guys ought to give them about 40 stories here, and about 60 stories here, and about 25 stories here, preserve this facade here, this facade here, and the tower there. ... Now, on the Kearny St. side, it is a two-part facade. There are a group of arches on the left, that is the north. And there is a group of arches on the right. They are separated by a wider pier than the pier which separates the other arches. I don't know precisely how many arches there are on each side of that pier, but the minority is toward California St., so by demolishing the northern side of the Kearny St. facade, they will gain tremendous footage there, leaving a small, narrow sliver of the building along Kearny and California, over which and around which they can build.

"Now, you all have this thing about having low-rise buildings. You've got the Bank of America building, 50 stories, right across the street. What are you trying to do? Preserve the Carnelian Room's views, I think. So why don't you let them build a lot higher on this part here, this part here all the way back, and partly over the existing building here — matching the facade of it. I mean, there's nothing to say you can't build a brick facade. They did it at the Hotel Utah with terra cotta, which is more expensive than brick. A little wing here, basically you have a U-shaped building.

"... I mean, you always concentrate on numbers. You just make all this big numbers game of spewing out statistics. It's grotesque; it's really grotesque. I mean, you should try to think up creative solutions for a problem like this. Now, with what I'm talking about, you see 60 stories in one quarter, say 45 in another, where they will preserve the precious Carnelian Room view, and 25 stories in another corner, 25 stories matching the original construction on its facade. I mean, you would save nearly all the building, and you would get a lot more office space. The developers would make a lot more money on it. ... [L]et me propose the motion that you require them to make a study of the equivalent amount of square footage on the smaller portion of the lot, please. ... I'm asking you to have a motion to save the facade of that building and build on the portion of the lot behind it at a higher elevation." (Randy Ritchie)

RESPONSE

The floor area available for development on the site, 340,000 sq. ft. including transferred area, and the height limit of 320 ft., would not be enough to result in the heights of 40 and 60 stories suggested in the alternative as described in the comment. An alternative could be developed which retains one-third of the Fireman's Fund Building fronting on California St. This building would be a stepped building 25 stories (320 ft. tall) at its tallest portion (four-level upper tower), stepping down to a 21-story portion (17-level mid-tower); the 21-level portion would

VIII. Summary of Comments and Responses

then step down to the four-story retained portion of the existing Fireman's Fund Building. The four base levels would contain a total floor area of about 70,000 sq. ft.

The 17-level mid-tower portion of the building (excluding the 4-story base) would be set back about 40 ft. from the Fireman's Fund Building. The base of the clock tower is about 30 ft. wide, so that the mid-rise portion would be set back about 10 ft. from the clock tower. The dimensions of the mid-rise portion would be 124 ft. along the south (California St.) facade, and about 90 ft. along the Kearny St. facade. Floor sizes would be about 11,160 sq. ft., including elevators and the mechanical core; total floor area in the mid-tower portion would be about 190,000 sq. ft.

The four-level upper tower portion of the building would be set back about 15 ft. from the south face of the mid-rise portion. Its dimensions would be 124 ft. (south wall) by 70 ft. (Kearny St. facade); resulting floor sizes would be 9,300 sq. ft. exclusive of elevator and mechanical core. The total floor area in the upper tower levels would be 37,200 sq. ft.

The facade of the building would be brick panels. The panels would be similar in appearance to actual brick construction but with somewhat less depth and texture. The building would be darker than the proposed project. Shadows would be not be as wide but would be as long as those of the project; they would coincide with shadows from existing buildings as do those from the project. The overall floor area would be about 300,000 sq. ft., 40,000 sq. ft. less than the project. The height limit of 320 ft. would prevent development of all available area on the site (basic allowable area and transferred area). Other environmental impacts resulting from this alternative would be reduced from those presented in the EIR for the project.

This alternative would not meet the architectural design intentions of the sponsor. The sponsor believes the design would be inferior to the project as proposed and would result in inefficient floor sizes. The sponsor believes such a building would overwhelm the retained portion of the Fireman's Fund Building. In order to achieve a better transition and higher quality relationship, more stepping would be required, which would further reduce floor sizes. Brick facing would result in a relatively dark building with little relationship to neighboring buildings. The resulting floor sizes would be inefficient, particularly those of the 4-level upper tower portion. These floors would be so small as to be almost unusable after allowance for elevators, restrooms and other equipment and systems necessary to the building operation. For these reasons, and because the full available area could not be developed under this alternative, the sponsor has rejected this alternative.

STAFF-INITIATED TEXT CHANGES

P. 19 and 44: A parking variance for off-site parking is only applicable to required parking. Since no parking is required for the project under the City Planning Code (Section 157), the project would not require a parking variance. Reference to the variance has been deleted from both noted pages.

P. 68: "17.4 million sq. ft." in the 5th line of the 1st full paragraph has been changed to read "16.1 million sq. ft."

VIII. Summary of Comments and Responses

D. CUMULATIVE PROJECTS LIST SUBMITTED BY SUE HESTOR

PROJECTS OMITTED FROM YOUR LISTS

Please provide square feet of each project.

Block 228 - 569 Sacramento is approved

Block 3776 - Welsh Commons - approved

Add the following projects:

141	81.151	100 Broadway	13,800	
177		1066 Grant	6,200	
258	82.421	Pine & Kearny Off. Bldg	400,000	
297	81.400	Olympic Club Hotel	293,500	
331	81.448	Union Square West	124,310	+ 507 hotel rms
342	81.17	Warfield Hotel	410,000	
647	81.417	1670 Pine	?	
690	RDA	Grosvenor (Post/Van Ness)	88,000	
768	81.22	Franklin & McAllister	53,600	
813	79.449	Fox Plaza Addition	142,000	
814	81.540	101 Hayes	131,900	
836	80.181	99 Oak	125,992	
3518	81.483	291 10th Street	?	
3702		Trinity Plaza	2,000,000	
3704/05	81.559	Lurie (5th & Market)	1,978,150	
3707	80.343	YBC/GSA	1,000,000	
3708	81.297	562 Mission	557,000	
3717	81.183	Mission/Main	352,000	
3719	81.138	301 Mission	261,500	
3722	81.280	199 New Montgomery	133,000	
3742	80.109	275 Steuart	207,000	
3750	82.241	2nd & Harrison	238,000	
3783	81.372	650 7th Street	134,000	
3788	81.352	640 2nd Street	39,079	
3803		195 Berry	113,000	
4491	82.197	SF Executive Park	1,330,000	
6272	81.470	Mission and Russia	59,300	
	RDA	Vanguard Van Ness/Turk	150,000	leasable
		Hills Brothers	700,000	leasable
		Mission Bay - per Residence		
		Element EIR, p. 36, 40,000		
		day-time workers	10,000,000	
		Rincon Point - per Residence		
		Element EIR, p. 37, 7,000		
		day-time workers	1,750,000	
13	82.419	350 Beach	?	
65	82.168	990 Columbus	10,750	
113	82.418	1171 Sansome	30,000	
146	82.401	644 Broadway	?	
176	82.368	900 Kearny	?	
180	82.183	963 Pacific	?	
227	82.463	505 Montgomery	?	
317	82.144	Grosvenor Townhouse	153,270	
327	82.445	Zaber-Stockton/O'Farrell	?	
529	82.424	1734 Union	?	
542	82.147	1969 Union	10,575	
612	82.446	2318 Fillmore	?	
641	82.200	1735 Franklin (conv)	?	
642	82.224	1601 Van Ness (conv)	70,958	
671	82.24	1581 Bush (conv)	16,000	
816	82.212	395 Hayes (conv)	?	
3504	82.137	44 Gough (conv)	?	

3534	82.139	1975 Market (conv)	?
3706/3723/3734			
	82.35	Olympia & York/YBC	5,095,000
3744-3749			
64/69	82.39	Rincon Hill Special Use D.	?
3750	82.77	642 Harrison (conv)	?
3763	82.384	400 2nd Street (conv)	81,384
3780	82.19	870 Brannan (conv)	230,000
3794	82.416	155 Townsend	170,000
3916	82.406	15th & Vermont Whl Shrm	?
3918	82.232	Wholesale Mart Addtn	62,353

PLUS, in this list at the very least, or in approved projects, please add in all projects/ uses approved in redevelopment plans for Western Addition I & II, Yerba Buena outside central blocks, Rincon Point/South Beach, because Planning has already signed off on them and will have no control regarding approval. They must be considered in the pipeline since they have already been approved as part of city policy by Supes, DCP/CPC and Redevelopment. Also any further possibilities in Golden Gateway and other redevelopment areas.

Page 65 - Approved Projects

Correction - block 3722⁴ is 3732
Please provide square feet for each project.
Add the following projects -

52	80.248	Francisco Place	50,000
143	81.353	1000 Montgomery (conv)	39,000
325	79.257	Hilton Tower #2	317,000
326	79.283	Holiday Inn	422,300
742	81.12	790 Van Ness	77,000
767	78.377	State Office Building	266,900
3701	79.314	Holiday Inn-Civic Center	124,900
3735	RDA	Gift Mart	340,000
3776	81.59	Welsh Commons	56,000
3788	81.15	690 2nd Street	16,600
4991	75.198	SF Executive Park III	345,000

Page 66 - Projects Under Construction

313	77.257	Neiman-Marcus	175,000
22	79.263	Holiday Inn- F Wf	141,800
330	80.171	Hotel Ramada	683,000
642		1625 Van Ness	95,000
671	RDA	Wealth Investments	118,500
738	RDA	One Flynn Center	?,
3706	RDA	Meridien Hotel	?
3735	RDA	Planters Hotel conv	?
3763	80.161	485-95 3rd St	10,300
3951	81.446	1099 16th St	15,000
4991	75.198	SF Executive Park II	105,000

QUESTION - Are there other approved/under construction Redevelopment projects (specific projects, as apposed to Redevelopment plan)?

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Traffic Engineering Division
460 McAllister St.
San Francisco, CA 94102
Attn: Scott Shoaf

Mayor's Economic Development Council
480 McAllister St.
San Francisco, CA 94102
Attn: Richard Goblirsch

X. Distribution List

San Francisco Department of
Public Works
Mechanical Section
45 Hyde St. #222
San Francisco CA 94102
Attn: Ray Danehy

San Francisco Municipal Railway
Muni Planning Division
949 Presidio Ave.
San Francisco, CA 94115
Attn: Peter Straus
Director of Planning

San Francisco Committee for
Utility Liaison on Construction
and Other Projects (CULCOP)
c/o GES - Utility Liaison
City Hall, Room 363
San Francisco, CA 94102
Attn: Herman Beneke

San Francisco Public Utilities
Commission
City Hall, Room 287
San Francisco, CA 94102
Attn: Richard Sklar

San Francisco Real Estate Department
450 McAllister St. Room 600
San Francisco, CA 94102
Attn: Wallace Wortman
Director of Property

San Francisco Water Department
Distribution Division
425 Mason St.
San Francisco, CA 94102
Attn: George Nakagaki, Manager

- Public Utilities Commission
Bureau of Energy Conservation
949 Presidio Ave., Room 111
San Francisco, CA 94115
Attn: Barbara Moy, Director

GROUPS AND INDIVIDUALS

AIA - San Francisco Chapter
790 Market St.
San Francisco, CA 94102

Bay Area Council, Inc.
348 World Trade Center
San Francisco, CA 94111

- Bendix Environmental Research Inc.
1390 Market Street, Suite 802
San Francisco, CA 94102

David Capron
Lincoln Property Company
220 Sansome St.
San Francisco, CA 94104

Marilyn Chu
Chnatown Neighborhood Improvement
Resource Center
615 Grant Avenue, 2nd Floor
San Francisco, CA 94108

D. Bruce Corbridge
Chickering & Gregory Law Offices
Three Embarcadero Ctr., 23rd Floor
San Francisco, CA 94111

Joseph Coriz
2853 22nd St.
San Francisco, CA 94110

Downtown Association
582 Market St.
San Francisco, CA 94104
Attn: Lloyd Pflueger, Mgr.

Downtown Senior Social Services
295 Eddy St.
San Francisco, CA 94102
Attn: Howard Ellmann

Environmental Impact Planning
319 Eleventh St.
San Francisco, CA 94103

Carl Imparato
1205 Garfield St.
Albany, CA 94706

The Foundation for San Francisco's
Architectural Heritage
2007 Franklin St.
San Francisco, CA 94109
Attn: Grant DeHart

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Friends of the Earth
1045 Sansome St.
San Francisco, CA 94111

Robert C. Gabrielski
Fleischmann and Farber
120 Montgomery St. Suite 2100
San Francisco, CA 94104

Gary Goss
434 Duncan St.
San Francisco, CA 94131

Gray Panthers
944 Market St.
San Francisco, CA 94102
Attn: W. Nunnally

Gruen, Gruen & Associates
564 Howard St.
San Francisco, CA 94105
Attn: Suzanne Lampert

Heller, Ehrman, White & McAuliffe
44 Montgomery St. 32nd Floor
San Francisco, CA 94104
Attn: Robert L. Gibrey, Jr.

Sue Hestor
4536 - 20th St.
San Francisco, CA 94114

Gerald D. Hines Interests
201 California St., Suite 1400
San Francisco, CA 94111
Attn: James Buie, Jr.

David Jones
241 Bartlett St.
San Francisco, CA 94110

Chris Lavdiotis
1919 28th Ave.
San Francisco, CA 94116

League of Women Voters
12 Geary St. Room 605
San Francisco, CA 94108

Legal Assistance to the Elderly
944 Market St. #803
San Francisco, CA 94102

Michael Levin
834 29th Avenue
San Francisco, CA 94121

Maria Markham
700 Mason St., Apt. 7
San Francisco, CA 94108

Gerald Owyang
1517 Reed Ave. #2
San Diego, CA 92109

Mrs. G. Bland Platt
339 Walnut St.
San Francisco, CA 94118

Charles Hall Page and Associates
364 Bush St.
San Francisco, CA 94104

Kay Pachtner
Consumer Action
1417 Irving St.
San Francisco, CA 94122

San Francisco Beautiful
41 Sutter St.
San Francisco, CA 94104
Attn: H. Klussman, President

San Francisco Building & Construction
Trades Council
400 Alabama St. Room 100
San Francisco, CA 94110
Attn: Stanley Smith

San Francisco Chamber of Commerce
465 California St.
San Francisco, CA 94102
Attn: Richard Morten

San Francisco Convention &
Visitors Bureau
1390 Market St. Suite 260
San Francisco, CA 94102

San Francisco Ecology Center
13 Columbus Ave.
San Francisco, CA 94111

X. Distribution List

San Francisco Forward
699 Market St.
San Francisco, CA 94104
Attn: Frank Nato

San Francisco Junior Chamber of Commerce
251 Kearny St.
San Francisco, CA 94104

San Francisco Labor Council
3068 - 16th St.
San Francisco, CA 94103
Attn: Bernard Speckman

San Francisco Planning and Urban
Research Association
312 Sutter St.
San Francisco, CA 94108

San Francisco Tomorrow
728 Montgomery St. Room 34
San Francisco, CA 94111
Attn: Suzanne Smith

San Franciscans for Reasonable Growth
88 First St.
San Francisco, CA 94104
Attn: Tony Kilroy

John Sanger & Associates
2340 Market St.
San Francisco, CA 94114

Senior Escort Program
South of Market Branch
814 Mission St.
San Francisco, CA 94100
Attn: Neighborhood Coordinator

Sierra Club
530 Bush St.
San Francisco, CA 94105
Attn: Becky Evans

Kent E. Soule
1180 Filbert St. #204
San Francisco, CA 94109

Tenant & Owners Development Corp.
177 Jessie St.
San Francisco, CA 94105
Attn: John Elberling

Paul Thayer
1033 Stanyan
San Francisco, CA 94117

Timothy A. Tosta
333 Market St. Suite 2230
San Francisco, CA 94105

Jeff Vance
Campeau Corp. of California
681 Market St.
San Francisco, CA 94105

Pat Walt
c/o Coldwell Banker
One Embarcadero Center
San Francisco, CA 94111

Steven Weicker
899 Pine St. #1610
San Francisco, CA 94108

ABUTTING PROPERTY OWNERS

Federal Home Loan Bank of San
Francisco
c/o Treasurer
600 California St.
San Francisco, CA 94108

650 California St. Assoc.
c/o Hogland, Bogart & Berten Mgt.
650 California St.
San Francisco, CA 94104

Sacramento St. Co.
350 Sansome St.
San Francisco, CA 94104

Utah International
550 California St.
San Francisco, CA 94104

United California Bank
Realty Corporation
600 South Spring St., 16th Floor
Los Angeles, CA 90014

X. Distribution List

City Property
c/o Milton Meyer & Co.
One Sansome St.
San Francisco, CA 94111

St. Mary's Square Inc.
601 California St. #1803
San Francisco, CA 94108

Bank of America
Tax Department #3245
Box 37000
San Francisco, CA 94137

Bank of America
Trust Department #3245
Box 37000
San Francisco, CA 94137

MEDIA

San Francisco Bay Guardian
27000 - Nineteenth St.
San Francisco, CA 94110
Attn: Patrick Douglas
City Editor

San Francisco Chronicle
925 Mission St.
San Francisco, CA 94103
Attn: Marshall Kilduff

San Francisco Examiner
110 - Fifth St.
San Francisco, CA 94103
Attn: Gerald Adams

San Francisco Progress
851 Howard St.
San Francisco, CA 94103
Attn: Mike Mewhinney

The Sun Reporter
1366 Turk St.
San Francisco, CA 94115

LIBRARIES

Documents Department
City Library - Civic Center
San Francisco, CA 94102
Attn: Faith Van Liere

Environmental Protection Agency Library
215 Fremont St.
San Francisco, CA 94105
Attn: Jean Circiello

Government Documents Section
Stanford University
Stanford, CA 94305

Government Publications Department
San Francisco State University
1630 Holloway Ave.
San Francisco, CA 94102

Hastings College of the Law - Library
198 McAllister St.
San Francisco, CA 94102

Institute of Governmental Studies
1209 Moses Hall
University of California
Berkeley, CA 94720

580 California Street
January 6, 1983
81.705E

CERTIFICATION MOTION 9588M

ADOPTING FINDINGS RELATED TO THE CERTIFICATION OF A FINAL ENVIRONMENTAL IMPACT REPORT FOR A PROPOSED OFFICE BUILDING LOCATED AT 580 CALIFORNIA STREET.

MOVED, that the San Francisco City Planning Commission ("Commission") hereby CERTIFIES THE Final Environmental Impact Report identified as "580 California Street Office Building", case file No. 81.705E, based upon the following findings:

1. The City and County of San Francisco, acting through the Department of City Planning ("Department") fulfilled all procedural requirements of the California Environmental Quality Act (Cal. Pub. Res. Code Section 21000 et seq., "CEQA"), the State CEQA Guidelines (Cal. Admin. Code Title 14, Section 15000 et seq., "CEQA Guidelines") and Chapter 31 of the San Francisco Administrative Code ("Chapter 31").

a. The Department determined that an EIR was required and provided public notice of that determination by publication in a newspaper of general circulation on April 23, 1982.

b. On October 1, 1982 the Department published the Draft Environmental Impact Report ("DEIR") and provided public notice in a newspaper of general circulation of the availability of DEIR for public review and comment and of the date and time of the City Planning Commission public hearing on the DEIR; this notice was mailed to the Department's list of persons requesting such notice.

c. Notices of availability of the DEIR and of the date and time of the public hearing were posted near the project site by Department staff on October 4, 1982.

d. On October 1, 1982, copies of the DEIR were mailed or otherwise delivered to a list of persons requesting it, to those noted on the distribution list in the DEIR, to adjacent property owners, and to other government agencies, the latter both directly and through the State Clearinghouse.

e. Notice of completion was filed with the State Secretary of Resources via the State Clearinghouse on October 1, 1982.

f. The State Clearinghouse agreed to a shortened public review period of 30 days and submitted comments from State agencies within that period.

2. The City Planning Commission held a duly advertised public hearing on said Draft Environmental Impact Report on November, 4, 1982, at which opportunity was given for, and public comment received on, the DEIR.

3. The Department prepared responses to comments on environmental issues received at the public hearing and in writing during the 30-day public review period, prepared additions to the text of the DEIR in response to comments received or based on additional information that became available during the public review period, and

corrected errors in the DEIR. This material was presented in a "Draft Summary of Comments and Responses," published on December 23, 1982, was distributed to the Commission and to all parties who commented on the DEIR, and was available to others upon request by Department offices.

4. A Final Environmental Impact Report has been prepared by the Department, based upon the Draft Environmental Impact Report, any consultations and comments received during the review process, any additional information that became available, and the Summary of Comments and Responses, all as required by law.

5. Project Environmental Impact Report files have been made available for review by the City Planning Commission and the public and these files are part of the record before the Commission.

6. On January 6, 1983, the Commission reviewed the Final Environmental Impact Report and found that the contents of said report and the procedures through which the Final Environmental Impact Report was prepared, publicized and reviewed comply with the provisions of the California Environmental Quality Act, the Guidelines of the Secretary for Resources and Chapter 31 of the San Francisco Administrative Code.

7. The City Planning Commission hereby does find that the Final Environmental Impact Report concerning EE 81.705E: 580 California Street Office Building is adequate, accurate and objective, and that there are no significant revisions to the Draft Environmental Impact Report, and hereby does CERTIFY THE COMPLETION of said Final Environmental Impact Report in compliance with the California Environmental Quality Act and the State Guidelines.

8. The Commission, in certifying the completion of said Final Environmental Impact Report, hereby does find that the proposed project to be presented to the Planning Commission for consideration and approval will have a significant effect on the environment in that it will create a specific demand for parking, will increase transit impacts on the Muni and other transit systems, will add to the demand for housing in the City and in the Bay Area, and will contribute to cumulative impacts on transit, pedestrian and vehicular traffic, and parking and housing demand, produced by reasonably foreseeable cumulative development in the downtown area.

I hereby certify that the foregoing Motion was ADOPTED by the City Planning Commission at its regular meeting of January 6, 1983.

Lee Woods, Jr.
Secretary

AYES: Bierman, Karasick, Kelleher, Klein, Nakashima

NOES: None

ABSENT: Rosenblatt, Salazar

PASSED: January 6, 1983

X. APPENDICES

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APPENDIX A: FINAL INITIAL STUDY*

580 CALIFORNIA STREET OFFICE BUILDING

SAN FRANCISCO

81.705E

April 1982

* Differences among data presented in the following Initial Study and the preceding Focused EIR are attributable to the availability of additional and more precise data during the subsequent preparation of the EIR.



DEPARTMENT OF CITY PLANNING

100 LARKIN STREET · SAN FRANCISCO, CALIFORNIA 94102

(415) 552-1134

NOTICE THAT AN ENVIRONMENTAL IMPACT REPORT IS DETERMINED TO BE REQUIRED

Date of this Notice: April 23, 1982

Lead Agency: City and County of San Francisco, Department of City Planning
100 Larkin Street, San Francisco, CA. 94102

Agency Contact Person: Diane Oshima

Tel: (415) 552-1134

Project Title: 81.705E

Project Sponsor: Gerald D. Hines Interests

580 California Street Office Building

Project Contact Person: James Buie, Jr.

Project Address: 580 California Street, Northeast corner of California and Kearny Sts.

Assessor's Block(s) and Lot(s): Assessor's Block 240, Lot 7

City and County: San Francisco

Project Description: Demolish one four-story building and construct a 23-story, 320-foot tall office building containing about 340,000 sq. ft. of space, including about 10,000 sq. ft. of ground-floor retail banking and other retail uses.

THIS PROJECT MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED. This determination is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15081 (Determining Significant Effect), 15082 (Mandatory Findings of Significance) and 15084 (Decision to Prepare an EIR), and the following reasons, as documented in the Environmental Evaluation (Initial Study) for the project, which is attached.

Deadline for Filing of an Appeal of this Determination to the City Planning Commission: May 3, 1982.

An appeal requires 1) a letter specifying the grounds for the appeal, and 2) a \$35.00 filing fee.

Alec S. Bash, Environmental Review Officer

580 CALIFORNIA STREET OFFICE BUILDING
INITIAL STUDY
81.705E

PROJECT DESCRIPTION

Gerald D. Hines Interests proposes to construct an office building in the Financial District of San Francisco at the northeast corner of California and Kearny Sts. The project site, opposite the Bank of America Headquarters Building, is Lot 7 in Assessor's Block 240. The 16,000-sq.-ft. site is a rectangle with frontages of 124 ft. on California St. and 128 ft. along Kearny and Spring Sts.

The project would replace the four-story Fireman's Fund Insurance Building, built in 1950. The proposed 23-story building would be about 320 ft. high and contain approximately 340,000 gross sq. ft. of space including about 10,000 gross sq. ft. of ground-floor retail banking and other retail uses. The proposed project would contain one subsurface parking level accessible from Spring St. with approximately 45 parking spaces. Three off-street loading docks would be accessible at grade from Spring St. to comply with the requirements of City Planning Commission Resolution No. 9286 dated January 21, 1982.

The basic Floor Area Ratio (FAR) of 14:1 permitted under Section 124 of the City Planning Code in the C-3-0 District would allow development of about 224,000 sq. ft. on the project site. Under Section 127(a) of the Code, the project sponsor intends to purchase and transfer to the site about 69,000 sq. ft. of basic permitted floor area from the Cahill property on Lot 16 of Assessor's Block 240 and about 47,000 sq. ft. of basic permitted floor area from the Utah International property on Lot 18 of Assessor's Block 240. These transfers, totalling about 116,000 total gross sq. ft., would result in a building on the site containing about 340,000 gross sq. ft. with an FAR of about 21.3:1.

The California St. frontage, which would provide access to the main lobby and elevator banks, would feature a pedestrian arcade outside the building. Access to ground-floor retail space would be provided from Kearny and Spring Sts. The upper 22 floors would contain about 330,000 sq. ft. office space.

The site is in the C-3-0 Downtown Office District and the 320-I Height and Bulk District. This would permit a building up to 320 ft. tall. Above 150 ft. in height, the maximum length could be 170 ft. and the maximum diagonal could be 200 ft.

The total construction period would be about 24 months, beginning with the demolition of the existing building. Initial occupancy of the building would be in late 1984 or early 1985.

POTENTIAL ENVIRONMENTAL EFFECTS

The proposed project at 580 California St. is examined in this Initial Study in order to determine potential effects on the environment. Potential environmental issues resulting from the proposed project include: circulation requirements, and project and cumulative effects on existing vehicular and transit systems, on pedestrian ways, and on parking; urban design considerations and shadow effects; housing impacts generated by increased

employment; construction noise; wind effects; air quality impacts associated with project-generated traffic; and energy consumption. These issues will be analyzed in detail in an environmental impact report (EIR) which will be prepared for the project. It was determined in this Initial Study that some potential impacts were either insignificant or that they would be mitigated through measures incorporated in the project design. The following items require no further environmental analysis.

Land Use Compatibility: The project would be consistent with existing land uses in the vicinity of the site and would comply with the height and bulk provisions of the City Planning Code.

Visual Quality: The proposed building would not block views of Downtown San Francisco and would not be a prominent feature on the skyline as the site is generally surrounded by taller developments. No glare would be generated by the proposed building.

Population/Employment/Housing: The proposed project would not displace any existing businesses or jobs.

Noise: After completion, project operation would not increase audible noise levels in the project vicinity.

Public Services and Utilities: The increased demand for public services and utilities attributable to the project would not require additional personnel or equipment.

Biology: The project would not have an effect on any plant, animal life or habitat as the site is completely urbanized.

Land: Excavation and grading would be required as part of construction. Soils at and below the foundation level are primarily dense sandy soils above bedrock and pile driving would not be required. Dewatering may be necessary only during the construction period. Measures included in the project which would mitigate potentially hazardous geologic or soil conditions on the site are included on p. 16.

Construction-Related Air Quality: Construction of the proposed project would have short-term effects on air quality in the project vicinity. Mitigation measures included in the project would reduce these effects to insignificant levels.

Hazards: The site and the project would neither cause nor be affected by hazardous uses or health hazards. A mitigation measure is included on p. 17 to reduce any possible conflicts with the City's emergency response plans.

Cultural Resources: No cultural or historical resources are known to be on the site. A mitigation measure is included on p. 17 to reduce impacts, should any subsurface artifacts of historical interest be found during excavation.

A. GENERAL CONSIDERATIONS

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc</u>
1. Would the project conflict with the objectives and policies in the Comprehensive Plan (Master Plan) of the City?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
2. Would the project require a variance, or other special authorization under the City Planning Code?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
3. Would the project require approval or permits from City Departments other than DCP or BBI, or from Regional, State or Federal agencies?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
4. Would the project conflict with adopted environmental plans and goals?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>

The project, which would provide new office space in the Downtown core on a site that is close to local and regional transit facilities, would be generally consistent with the goals and objectives of the San Francisco Master Plan. It would respond to Objective 6 of the Commerce and Industry Element of the Comprehensive Plan to support San Francisco as "prime location for financial, administrative, corporate, and professional activity." The project would be consistent with Policy 2 of Objective 6 of the Commerce and Industry Element to "maintain a compact downtown core" and Policy 4 of Objective 6 to provide "amenities for those who live, work and use the Downtown".

The project would be light in color and feature bay style windows. The proposed tiered roofline is intended by the architect to give a sculptured form to the upper portion of the building. The project design would respond to Policy 2 of the Urban Design Element, Policies for Major New Development, to "avoid extreme contrasts in color, shape and other characteristics which will cause new buildings to stand out in excess of their public importance."

The project would provide new parking in the downtown control area and thus would not respond to Objective 1, Policy 4 of the Transportation Element, which discourages the provision of new long-term parking facilities in the downtown core. The proposed subsurface parking level would extend beneath the California St. and Kearny St. sidewalks. This would require a variance from Section 155(b) of the City Planning Code, which requires every off-street parking space to be provided entirely on private property. A revocable encroachment permit, to allow subsurface parking beneath public sidewalks, would be applied for with the building permit. The Departments of City Planning and Public Works would make a recommendation to the Board of Supervisors who would then hold a public hearing on the encroachment permit application; the encroachment permit would require final approval from the Board of Supervisors.

Under Section 127(a) of the City Planning Code, the proposed project would transfer to the site a total of about 116,000 gross sq. ft. of basic permitted floor area from two adjacent lots on Assessor's Block 240. This would allow the proposed building to have an FAR of 21.3:1 as of right; no special action

would be required of the City Planning Department or Commission. Upon purchase of the permitted gross floor area, notice of the transfer would be recorded with the deeds of all the properties affected.

B. ENVIRONMENTAL IMPACTS: Yes Maybe No N/A Disc.

1. Land Use. Would the proposed project:

- | | | | | | |
|--|-------|-------|----------------------|-------|----------------------|
| a. Be different from surrounding land uses? | _____ | _____ | _____ <u>X</u> _____ | _____ | _____ <u>X</u> _____ |
| b. Disrupt or divide the physical arrangement of an established community? | _____ | _____ | _____ <u>X</u> _____ | _____ | _____ |

Existing land uses near the project site are generally office buildings with ground-floor retail banking operations; there is one retail food establishment on California St. on the project block. The ground-floor commercial uses of the proposed structure could include retail banking. To the extent that the new uses are other than retail banking or retail food outlets, they would be different from most existing ground-floor uses in the area, but would be compatible with the C-3-0 zoning designation, which permits other commercial uses, including retail stores.

2. Visual Quality and Urban Design. Would the proposed project: Yes Maybe No N/A Disc.

- | | | | | | |
|---|----------------------|----------------------|----------------------|-------|----------------------|
| a. Obstruct or degrade any scenic view or vista open to the public? | _____ | _____ | _____ <u>X</u> _____ | _____ | _____ |
| b. Reduce or obstruct views from adjacent or nearby buildings? | _____ <u>X</u> _____ | _____ | _____ | _____ | _____ <u>X</u> _____ |
| c. Create a negative aesthetic effect? | _____ | _____ <u>X</u> _____ | _____ | _____ | _____ <u>X</u> _____ |
| d. Generate light or glare affecting other properties? | _____ | _____ | _____ <u>X</u> _____ | _____ | _____ <u>X</u> _____ |

The 320-ft. tall project would be consistent with the height limit for the site and comparable to the scale of neighboring development. The proposed building would be about 460 ft. shorter than the Bank America Building, directly south of the site, and about 150 ft. shorter than 650 California St., one half block to the west. The project would be similar in height to the Liu Chong Hing Bank, diagonally across California St. The project would be about 180 ft. taller than 550 California St. directly east of the site across Spring St., about 220 ft. taller than the Federal Home Loan Bank Building to the west across Kearny St., and about 200 ft. taller than 550 Kearny St., directly north of the site.

The project would not obstruct any scenic views or vistas now available to the public and would not be a prominent feature on the skyline as the site is surrounded by taller buildings to the east, south and west. The project would be visible from the north on Telegraph Hill blocking some views of the lower portion of the Bank of America Building. The project would block some short-range views from the buildings nearby; view blockage would not be extensive, particularly from surrounding taller developments. The project would block views to the north from some of the floors of the Bank of America and Federal Home Loan Bank buildings. Views to the west would be blocked from

550 California St. Views to the east would be blocked from 650 California St., and to the northeast from the Liu Chong Hing Bank. The project would reduce pedestrian views across the site from the southern side of California St. looking toward Telegraph Hill. The building would contain no mirrored glass or high-intensity lighting and no glare would be generated by the project. The effects of view blockage and glare will not receive further discussion in the EIR.

The proposed project would change the appearance of the site by replacing a 60-ft.-high building with red brick facade, with a 320-ft.-high building with a ground-floor pedestrian arcade and a light colored facade. Further discussion, drawings of the proposed building and photographs of the site will be presented to the EIR to enable the reader to evaluate the aesthetic impact of the project.

3. Population/Employment/Housing. Would the proposed project:

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Alter the density of the area population?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
b. Have a growth-inducing effect?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
c. Require relocation of housing or businesses, with a displacement of people, in order to clear the site?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>
d. Create or eliminate jobs during construction and operation and maintenance of the project?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
e. Create an additional demand for housing in San Francisco?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>

The existing Fireman's Fund building is scheduled to be vacated by the Fireman's Fund Insurance Company in the fourth quarter of 1982. The company's 225 employees will be relocated from the site to Novato, in northern Marin County./1/ This relocation is not a result of the proposed project. The project would not require any relocation of other businesses in order to clear the site. Relocation from the project site will not be discussed in the EIR.

The project would increase the daytime population at the site by about 1,400 people. The project would generate approximately 500 person-years of construction employment jobs during construction and about 1,400 permanent jobs during building operation. The proposed project would have secondary impacts on the job market in the City and Bay Area region and would create an additional demand for housing in San Francisco. The increases in employment and housing demand attributable to the project will be discussed in the EIR.

NOTE - Population/Employment/Housing

/1/ City of Novato, Fireman's Fund/American Express San Marin Project Final EIR, prepared by Environmental Science Associates, Inc., December, 1979.

4. Transportation/Circulation. Would the construction or operation of the project result in:

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Change in use of existing transportation systems? (transit, roadways, pedestrian ways, etc.)	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
b. An increase in traffic which is substantial in relation to existing loads and street capacity?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>
c. Effects on existing parking facilities, or demand for new parking?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
d. Alteration to current patterns of circulation or movement of people and/or goods?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
e. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
f. A need for maintenance or improvement or change in configuration of existing public roads or facilities?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>
g. Construction of new public roads?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>

Increased employment at the site would impose increased demands on all existing public and private transportation systems, including Muni, BART, Golden Gate Transit, AC Transit, SamTrans, and the Caltrans Peninsula Train. Existing pedestrian access and movement also could be changed. These impacts will be analyzed in the EIR.

The demand for vehicle parking generated by the project would not be met entirely by the proposed subsurface parking level or by existing parking near the project. The project would respond to City Planning Resolution No. 9286 by providing three off-street loading facilities. On-street loading space may be necessary at times, affecting circulation in the project area. The project would require curb cuts on Spring St. for access to the loading dock and subsurface parking level; vehicular access to the project could result in pedestrian-vehicle and vehicle-vehicle conflicts on Spring St. Project-related and cumulative transportation, circulation and parking impacts will be analyzed in the EIR.

5. <u>Noise</u>	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Would the proposed project result in generation of noise levels in excess of those currently existing in the area?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
b. Would existing noise levels impact the proposed use?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>
c. Are Title 25 Noise Insulation Standards applicable?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>

Project Construction

Project construction would require approximately 24 months and would involve demolition of the existing building, excavation, and construction of the proposed structure. Construction noise associated with site development would temporarily increase noise levels in the vicinity. Exterior noise levels could reach 85 dBA at 50 ft.; interior noise levels at structures adjacent to the site could reach 66 dBA with windows closed and 71 dBA with windows open. People in offices and retail establishments adjacent to the site would be the most sensitive receptors of construction noise. Construction noise impacts will be analyzed in the EIR.

Project Operation

The typical noise environment of downtown San Francisco is dominated by vehicular traffic noise. The Environmental Protection Element of the San Francisco Comprehensive Plan indicated a day-night average noise level (L_{dn}) of 75 dBA on California St. adjacent to the site in 1974./1,2/ The Environmental Protection Element contains guidelines for determining the compatibility of various land uses with different noise environments. For office uses the guidelines recommend no special noise control measures in an exterior noise environment up to an L_{dn} of 70 dBA. For this noise level, the guidelines recommend an analysis of noise reduction requirements and inclusion of noise insulation features in the building design. The project sponsor has indicated that noise insulation measures would be included as part of the design. The proposed structure would not include housing and Title 25 Noise Standards would not, therefore, be applicable.

Project operation would not result in noise levels greater than those presently existing in the area. The amount of traffic generated by the project during any hour of the day, and cumulative traffic increases at the time of project completion, would cause traffic noise levels to increase by less than one dBA. To produce a detectable increase in environmental noise, a doubling of existing traffic volume would be required; traffic increases of this magnitude would not occur with anticipated cumulative development. Noise generated by loading activities at the site would be reduced because loading would primarily take place at an enclosed loading dock accessible from Spring St., rather than exclusively on the street as at present.

Mechanical equipment noise is regulated by the San Francisco Noise Ordinance, San Francisco Municipal Code, Section 2909, "Fixed Source Noise Levels," which the project sponsor would be required to follow. The project site and surrounding area are zoned C-3-0. In this zone, the ordinance limits equipment noise levels at the property line to 70 dBA between 7 a.m. and 10 p.m. and 60 dBA between the hours of 10 p.m. and 7 a.m. During lulls in traffic, mechanical equipment generating 70 dBA could dominate the noise environment at the site. The project engineer and architect would include design features in the building to limit mechanical equipment noise levels to 60 dBA. As equipment noise would be limited to 60 dBA to meet the nighttime limit, it would not be perceptible within the sound-level context of the project. Mechanical equipment would be located in the rear of the building facing Spring St. and in the core and penthouse of the proposed project. Further discussion of operational noise will not be included in the EIR.

NOTES - Noise

/1/ dBA is a measure of sound in units of decibels (dB). The "A" denotes the A-weighted scale, which simulates the response of the human ear to various frequencies of sound.

/2/ Ldn, the day-night average noise level, is a noise measurement based on human reaction to cumulative noise exposure over a 24-hour period, taking into account the greater annoyance of nighttime noises; noise between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.

6. Air Quality/Climate.

Would the proposed project result in:	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Violation of any ambient air quality standard or contribution to an existing air quality violation?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
b. Exposure of sensitive receptors to air pollutants?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
c. Creation of objectionable odors?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
d. Burning of any materials including brush, trees, or construction materials?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
e. Alteration of wind, moisture, or temperature (including sun shading effects), or any change in climate, either locally or regionally?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>

Air quality data collected by the Bay Area Air Quality Management District show that San Francisco experiences infrequent violations of the ambient air quality standards for ozone, carbon monoxide (CO) and total suspended particulates (TSP). Climatic conditions in San Francisco allow rapid dispersal of air pollutants, so that local stationary sources of emissions rarely create a measurable impact at monitoring stations. Rather, their impact is to add to regional accumulations of pollutants.

Two types of air quality impacts could be expected from this proposed project; short-term impacts from construction activity, and long-term impacts related to use and operation of the structure. Construction activities would temporarily affect local air quality. Dust emissions during demolition and excavation would increase particulate concentrations adjacent to the site. Dustfall can be expected at times on surfaces within 200 to 400 ft. of the site under low winds; under high winds, human discomfort may occur downwind from blowing dust. A mitigation measure, as described on p. 21, would reduce particulate emissions generated during construction activities; construction air quality effects will not be considered in the EIR.

Building emissions would arise from natural gas combustion and would be at roof level. Annual emissions from building operations would represent less than five percent of project-related emissions. Traffic generated by the proposed building would produce the primary air quality impact from the

project and would incrementally degrade air quality. Subsequent environmental documentation will be required to determine specific project-related and cumulative traffic air quality impacts.

The project, in combination with buildings nearby may increase local wind speeds and gustiness. A wind tunnel study will be performed to determine wind effects of the project; results of that study will be included in the EIR. The project could increase shadows on sidewalks along streets near the project; diagrams will be included in the EIR to assess increased shading from the proposed building.

7. Utilities and Public Services. Would the proposed project:

Yes Maybe No N/A Disc.

A. Have any effect upon, or result in a need for new or altered, governmental services in any of the following?

fire protection	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
police protection	<u> </u>	<u> </u>	<u> x </u>	<u> </u>	<u> X </u>
schools	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
parks or other recreational facilities	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
maintenance of public facilities	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
power or natural gas utilities	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
communications systems	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
water	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
sewer/storm water drainage	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>
solid waste collection and disposal	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> X </u>

Fire

Fire protection services at the site are adequate to meet the needs of the proposed project under normal conditions./1/ A low and a high pressure fire hydrant are at the intersection of California and Kearny Sts. Additional hydrants are available within 100 ft. of the site./1/ The project would incorporate all emergency response systems stipulated by the Life Safety Code including fire alarms, an automatic sprinkler system, an emergency communication system, an emergency power supply and an on-site emergency water supply. These measures would reduce hazards to building occupants during an earthquake or fire.

Cumulative development in San Francisco will add additional office space to the downtown area. It can be anticipated that the number of fire incidents would increase as the number of people occupying the district increases. New high-rise buildings, which must comply with the Life Safety provisions of the San Francisco Building Code, are of Type 1 construction/2/, thus making the chance of a fire that would spread from building to building relatively small. On the average, replacing older, more vulnerable, low occupancy structures with higher quality, greater occupancy highrise buildings probably has no measurable effect on the need for fire protection./3/

Police

The project site is in the Central District of the San Francisco Police Department served by the station at 766 Vallejo St. The project would be in crime reporting area 342. The project area is served by a two-person patrol car 24 hours per day. The response time to a priority call at the project

site would be approximately two minutes. In 1981, 572 crimes were reported in the area of the project. The area had the 14th highest crime rate of the 26 areas served by the Central District Station, which is slightly above the median of 561 crimes. The range in the 26 reporting areas of the Central District was 22 to 3633 crimes. No additional personnel or equipment would be required by the police department for the project; however, cumulative growth in the site vicinity could increase the demand for police services. If statistics later indicate such a demand, additional personnel would be assigned to the area./4/

Parks and Recreation

The proposed project would create additional demand for recreational facilities in the project area. Several indoor recreational facilities are available within ten blocks of the site. St. Mary's Square Park, Portsmouth Square, and the Transamerica Redwood Park provide outdoor recreational and open space in the area. There is a plaza on the north side of the Bank of America Building, directly across California St. from the site.

Maintenance

The project would not create the need for additional maintenance of public facilities.

Electric and Natural Gas Utilities

Gas mains and electric power lines at the site are adequate to meet the needs of the project./5/ The project would conform to California Energy Commission standards for new non-residential buildings. The effect of cumulative development on existing energy capacities has not been quantified; however, Pacific Gas and Electric Company is required to provide energy to meet the needs of existing and future consumers.

Communications

Telephone services would be provided by the Pacific Telephone Company through the Pine-Bush Central Office. No additional improvements to existing equipment would be required./6/

Water

The proposed project would increase the consumption of water at the project site. It is estimated that the project would use 26,000 gallons of water per day (gpd) at full occupancy, increasing water use on the site by about 24,240 gpd. An 8-in.-diameter water main is located under California St. approximately 24 ft. south of the site. A 12-in.-diameter water main is located under Kearny St., approximately 26 ft. west of the site. These facilities would provide adequate service to the proposed project./7/ The only aspect of the water distribution system which may be affected by cumulative development is capacity; however, capacity of water mains is dealt with on a project specific basis./8/ Should insufficient capacity be evident (as determined by the Fire Department) an increase of the system capacity would be required at the expense of the project sponsor.

Sewers and Stormwater

The project site is served by 3-ft. by 5-ft. brick sewers in California and Kearny Sts. It has been recommended that the proposed building connect to the sewer system through the 16-in.-diameter sewer line in Spring St./9/ As part of the Cable Car Rehabilitation Program, the 3-ft. by 5-ft. brick sewer on California St. between Kearny and Montgomery Sts. will be replaced with a 12-in.-diameter vitreous concrete pipe./9/ The project would generate an estimated wastewater flow increase of about 24,240 gpd. The sewers serving the site have sufficient capacity to carry the additional load, and no improvements are expected to be required./9/ Wastewater is collected by a combined sewer system which carries storm flows as well as dry-weather flows. Storm flows are many times greater than dry-weather flows, consequently the sewer system is designed to carry many times the volume of sewage produced by City buildings. Project-generated wastewater flows represent about 0.04% of the average daily flows of 65 million gallons per day (MGD) currently being treated at the North Point Water Pollution Control Plant, and about 0.03% of the projected 85 to 90 MGD treatment capacity of the Southeast Water Pollution Control Plant which will go into interim operation in 1982. Flows to the North Point plant, which now serves the site, would be directed to the Southeast plant at that time.

Solid Waste Disposal

The project would generate about 0.7 tons of solid waste per day. The Golden Gate Disposal Company serves the existing building and anticipates no problems in meeting the collection requirements of the proposed building./10/ Disposal of municipal solid waste presently occurs at the landfill site in Mountain View. The contract with this facility expires in October 1983. The City is presently negotiating with other landfill sites to accept San Francisco's solid waste on an interim basis until a solid waste program is implemented in late 1986. The solid waste program is proposed to consist of intensified recycling, a resource recovery project generating electricity from the incineration of solid wastes, and landfill disposal of bypass and residual wastes from the resource recovery process. The project and cumulative development are not expected to present problems in solid waste disposal upon completion of the solid waste program./11/

NOTES - Public Services

/1/ Edward E. Murphy, Chief, Support Services. San Francisco Fire Department, letter communication, January 19, 1982.

/2/ Type 1 buildings have structural elements made of reinforced concrete, reinforced grouted masonry, reinforced hollow concrete masonry or steel; and the exterior walls, roofs, floors and some inner walls of "fire-resistive noncombustible construction." San Francisco Building Code Section 1801.

/3/ Information contained in this section is from Bendix Environmental Research, Inc., Environmental Consultants and Fire Protection Engineers, confirmed by Emmet D. Condon, Deputy Chief, San Francisco Fire Department, September 24, 1981.

/4/ Paul J. Libert, Sergeant, San Francisco Police Department, Crime Analysis, letter communication, January 19, 1982.

/5/ Alfred Williams, Industrial Power Engineer, Pacific Gas and Electric Co., telephone conversation, February 1, 1982.

/6/ Barney Parish, Business and Industry Consultant Division, Pacific Telephone Company, telephone conversation, February 1, 1982.

/7/ P. Dobooski for J.E. Kenck, Manager, San Francisco Water Department, City Distribution Division, letter communication, January 14, 1982.

/8/ Eugene Kelleher, General Manager and Chief Engineer, San Francisco Water Department, telephone conversation, January 5, 1982.

/9/ Nathan Lee, Engineering Associate II, Planning and Design Division, San Francisco Clean Water Program, letter communication, January 28, 1982.

/10/ Fiore Garbarino, Treasurer, Golden Gate Disposal Company, telephone conversation, February 1, 1982.

/11/ David Gavrich, Assistant Manager for Solid Waste Management, Chief Administrative Office, Special Projects, City of San Francisco, telephone conversation, January 6, 1982.

8. Biology

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Would there be a reduction in plant and/or animal habitat or interference with the movement of migratory fish or wildlife species?	_____	_____	<u>X</u>	_____	_____
b. Would the project affect the existence or habitat of any rare, endangered or unique species located on or near the site?	_____	_____	<u>X</u>	_____	_____
c. Would the project require removal of mature scenic trees?	_____	_____	<u>X</u>	_____	_____

9. Land. (topography, soils, geology) Would the proposed project result in or be subject to:

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Potentially hazardous geologic or soils conditions on or immediately adjoining the site? (slides, subsidence, erosion, and liquefaction)	_____	_____	<u>X</u>	_____	<u>X</u>
b. Grading? (consider height, steepness and visibility of proposed slopes; consider effect of grading on trees and ridge tops)	_____	<u>X</u>	_____	_____	<u>X</u>
c. Generation of substantial spoils during site preparation, grading, dredging or fill?	_____	_____	<u>X</u>	_____	_____

No site specific soils analysis has been made. Geotechnical data available from the Bank of America Building across California St., the International

Building and St. Mary's Garage to the southwest, and the Hartford Building to the west across Kearny St., indicate that soils at and below the foundation level of the project site are primarily dense sandy soils above bedrock./1/ These deposits are suitable for shallow building foundations and pile driving would not be required. The type of support to be use for the proposed building has not been determined; mat or spread footings, straight shaft and belled piers are under consideration. Analysis of the site soils would be undertaken by a geotechnical consultant. The project sponsor would follow the recommendations of the geotechnical consultant in site development.

The only grading on the site would be related to foundation preparation. During excavation, pit walls would be shored up and protected from slumping or lateral movement of soils into the pit. Demolition of the existing structure and excavation would result in the removal of brick, concrete and debris from the site. Any material removed would be disposed of in an officially approved disposal site. Water is expected to be encountered near the basement elevation and dewatering may be necessary during construction./1/ The project would include measures to mitigate potential impacts associated with excavation and dewatering (see p. 22).

During construction, the project sponsor would be required to comply with the San Francisco Building Code and the California Occupational Safety and Health Agency. The Building Code specifies that "the foundation type for any building or structure shall be selected with due consideration given to subsurface conditions and requirements for the structural behavior." Additionally, the structural design of the building would be required to meet the minimum safety requirements for lateral seismic forces as required by the San Francisco Building Code. As the project would conform to these standards, no further analysis is needed in the EIR. Mitigation measures have been incorporated in the proposed project to mitigate possible geotechnical construction impacts (see p. 22).

NOTE - Land

/1/ Dames and Moore, Preliminary Geotechnical Study for Proposed Office Building, San Francisco, California, January 18, 1982.

10. <u>Water.</u>	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
Would the proposed project result in:					
a. Reduction in the quality of surface water?	___	___	<u>X</u>	___	<u>X</u>
b. Change in runoff or alteration to drainage patterns?	___	___	<u>X</u>	___	<u>X</u>
c. Change in water uses?	<u>X</u>	___	___	___	<u>X</u>
d. Change in quality of public water supply or in quality or quantity (dewatering) of groundwater?	___	<u>X</u>	___	___	<u>X</u>

The project would not reduce the quality of surface water, change the amount of runoff from the site, or alter drainage patterns, because the site is now entirely covered with impermeable surfaces. The project would increase water

use on the site to an estimated 26,000 gallons per day (gpd). Current water use on the site is an average of 1,760 gallons per day gpd./1/

The water table is expected to be near the depth of the excavation./2/ Dewatering may be required during construction. If necessary, dewatering would be temporary and would take place only during foundation preparation activities. Dewatering would be done inside the building excavation; no dewatering would occur outside of the excavation. Drawdown of the groundwater level outside the excavation could produce some local subsidence which could damage the streets or older brick buildings in the immediate vicinity of the site. The groundwater level outside the excavation would be monitored during dewatering using groundwater observation wells. Due to the sandy texture of subsurface deposits, the groundwater level outside the excavation would not be appreciably lowered. The project would include measures which would mitigate potential impacts associated with excavation and dewatering (see p. 22).

NOTES - Water

/1/ William F. Newberry, Manager/Real Estate, American Express Company, letter, January 19, 1982.

/2/ Dames and Moore, Preliminary Geotechnical Study for a Proposed Office Building, San Francisco, CA, January 18, 1982.

11. <u>Energy/Natural Resources</u> . Would the proposed project result in:	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Any change in consumption of energy?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
b. Substantial increase in demand on existing energy sources?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>
c. An effect on the potential use, extraction, conservation or depletion of a natural resource?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>

The building would be designed and constructed to conform with the energy requirements of Title 24 of the California Administrative Code so that energy use per square foot of floor area would be less than at present. Because of the greater building size, the project would increase the total amount of energy consumed at the site. Energy consumption and conservation will be discussed in the EIR.

12. <u>Hazards</u> . Would the proposed project result in:	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Increase risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals or radiation), in the event of an accident or cause other dangers to public health or safety?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
b. Creation of or exposure to a potential health hazard?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
c. Possible interference with an emergency response plan or emergency evacuation plan?	_____	<u>X</u>	_____	_____	<u>X</u>

The project would increase the City's daytime population. Employees in the proposed building would contribute to congestion if an emergency evacuation of the Downtown Area was required. A measure to mitigate the effect of the project on the City's emergency response plan is included on p. 23.

13. Cultural. Would the proposed project:

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>	<u>N/A</u>	<u>Disc.</u>
a. Include or affect a historic site, structure or building?	_____	_____	<u>X</u>	_____	<u>X</u>
b. Include or affect a known archaeological resource or an area of archaeological resource potential?	_____	_____	<u>X</u>	_____	<u>X</u>
c. Cause a physical change affecting unique ethnic or cultural values?	_____	_____	<u>X</u>	_____	_____

The site is inland of the original 1849 shoreline and no buried ships or other cultural resources are known to exist on the site./1/ Scattered artifacts of historic interest may be found; a mitigation measure included on p. 23 would protect cultural or historic resources found during construction.

The site contains no buildings rated to be of major architectural importance in the 1979 survey conducted by the Foundation for San Francisco's Architectural Heritage or included in the City's official list of Architecturally and/or Historically Significant Buildings, adopted by the City Planning Commission on May 29, 1980. The Fireman's Fund Building, which occupies the project site, was included in the Heritage survey but it was classified as "not rated". Buildings constructed after 1945, such as the Fireman's Fund Building, were not rated as to architectural importance. Discussion of cultural or historic factors will not be included in the EIR.

NOTE - Cultural

/1/ The San Francisco Maritime Museum has prepared an unofficial map which identifies the approximate locations of Gold Rush Ships (this map has not been updated since 1964).

C. MITIGATION

	<u>Yes</u>	<u>No</u>	<u>Disc.</u>
Are mitigation measures included in the project?	<u>X</u>	_____	<u>X</u>
Are other mitigation measures available?	<u>X</u>	_____	_____

Mitigation measures currently proposed as part of the project are listed below. Other mitigation measures may be identified during subsequent environmental review and will be included in the EIR.

NOISE

- The project contractor would muffle and shield intakes and exhausts, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible.
- The project sponsor would perform an analysis of noise reduction requirement for the project and include noise insulation features in the building design. Such design features would include fixed windows and climate control.

AIR QUALITY/CLIMATE

- During excavation, unpaved demolition and construction areas would be wetted to hold down dust. This would be done at least twice a day; with complete coverage, particulate emissions (dust) would be reduced about 50%.
- The general contractor would maintain and operate construction equipment in such a way as to minimize exhaust emissions.

UTILITIES AND PUBLIC SERVICES

- To reduce the demand on police protection services, the project would incorporate internal security measures such as closed-circuit television cameras, internal security personnel, well lighted entries, alarm systems and computerized office entrances accessible only by pre-programmed magnetic keys.
- The project would incorporate low-flow faucet and toilet fixtures to reduce water consumption and wastewater volume.
- The building would be equipped with a trash compactor to reduce the volume of solid waste requiring storage and transportation.

LAND (Topography, Soils, Geology)

- A detailed foundation and structural design study would be conducted for the building by a California licensed structural engineer and a geotechnical consultant. The project sponsor would follow the recommendations of these studies during the final design and construction of the project.
- If dewatering were necessary, groundwater observation wells would be installed to monitor the level of the water table and other instruments would be used to monitor potential settlement and subsidence. If, in the judgment of City engineers, unacceptable subsidence occurs during construction, groundwater recharge would be begun to halt the settlement. This might cause a delay in construction.
- Any groundwater pumped from the site would be retained in a holding tank to allow suspended particles to settle, if this is found necessary by the Industrial Waste Division of the Department of Public Works, to prevent sediment from entering the storm drain/sewer lines.

HAZARDS

- An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the City's emergency planning activities and the project's plan and to provide services to building occupants in the event of an emergency. The project's plan would be reviewed by the Office of Emergency Services and implemented by building management before issuance by the Department of Public Works of final building permits.

CULTURAL

- Should evidence of cultural or historic artifacts of significance be found during project excavation, the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board would be notified. The project sponsor would select an archaeologist or other expert to help the Office of Environmental Review determine the significance of the find and whether feasible measures, including appropriate security measures, could be implemented to preserve or recover such artifacts. The Environmental Review Officer would then recommend specific mitigation measures, if necessary, and recommendations would be sent to the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

D. ALTERNATIVES:

	<u>Yes</u>	<u>No</u>	<u>Disc.</u>
Were other alternatives considered?	<u>X</u>	<u> </u>	<u>X</u>

Several alternatives to the project as proposed are under consideration. These alternatives will be discussed in greater detail in the EIR for the project.

Alternative One: No Transfer of Permitted Basic Gross Floor Area. This alternative would be an office building of similar design to the project, but would not include the transfer of permitted basic gross floor area from adjacent parcels. The basic FAR of 14:1 permitted by the City Planning Code would be developed on the site.

Alternative Two: Guiding Downtown Development - Commercial Use Only. This alternative would be designed to meet the criteria outlined in Guiding Downtown Development, published in May 1981 by the Department of City Planning. Under this alternative the base commercial FAR would be 12:1, as recommended in Guiding Downtown Development. The transfer of basic permitted gross floor area to the site from adjacent parcels would be used to increase the amount of office space, resulting in a total building FAR of 17:1, the maximum FAR recommended by the proposed guidelines. There would be no on-site parking provided for passenger vehicles under this alternative.

Alternative Three: Guiding Downtown Development - Mixed Use Alternative. This alternative would be designed to comply with the proposed guidelines contained in Guiding Downtown Development. This alternative would include the development of on-site housing and would not involve the transfer of basic permitted gross floor area to the site from adjacent parcels. Under

Alternative Three the commercial FAR would be 12:1 and an additional FAR of 5:1 would be developed for residential use; the overall FAR would be 17:1, the maximum FAR recommended by the proposed guidelines.

Alternative Four: No Project Alternative. This alternative would retain the existing structure on the project site.

E. MANDATORY FINDINGS OF SIGNIFICANCE:

	<u>Yes</u>	<u>No</u>	<u>Disc.</u>
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal, or eliminate important examples of the major periods of California history or prehistory?	_____	<u>X</u>	_____
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	_____	<u>X</u>	_____
3. Does the project have possible environmental effects which are individually limited, but cumulatively considerable?	<u>X</u>	_____	<u>X</u>
4. Would the project cause substantial adverse effects on human beings, either directly or indirectly?	_____	<u>X</u>	_____
5. Is there a serious public controversy concerning the possible environmental effect of the project?	_____	<u>X</u>	_____

The project would be expected to generate a demand for additional housing in San Francisco and would contribute to cumulative traffic increases in the Downtown. These concerns will be considered in the EIR to be prepared for the project.

● APPENDIX B: LAND USE AND CUMULATIVE DOWNTOWN DEVELOPMENT

Projected cumulative office development in parts of the Bay Area outside of the greater downtown area may have environmental impacts. The analysis assumes that all projected development will occur, and does not project corresponding increases in capacity beyond that which is relatively definitively planned. Whether, where, when and in what amounts such development may occur are dependent on a number of factors outside the jurisdiction of San Francisco government agencies. Two such factors are 1) the exercise of zoning, planning and environmental review authority by other jurisdictions and 2) the rate of employment growth throughout the Bay Area.

The following information is provided to describe the possible effects of cumulative office development throughout the Bay Area, and to explain the regional government structure that exists to address those effects.

San Francisco is the center of a nine-county region which has lesser activity nodes in each of the other counties comprising the region. Recognizing the interdependence of each part of the region, local jurisdictions have entrusted regional planning, and implementation of adopted policy measures where appropriate, to regional agencies. Responsibility for the comprehensive regional plan is vested in the Association of Bay Area Governments (ABAG), the agency which forecasts regional growth. The Metropolitan Transportation Commission (MTC) is responsible for coordinating regional transit and vehicular plans and policies. The Bay Area Air Quality Management District (BAAQMD) is responsible for maintaining and improving adherence to air quality standards. These and other regional agencies coordinate their planning and implementation activities on issues of mutual concern.

Long-range planning by the regional planning entities, and planning and implementation by operating agencies, such as the Golden Gate Bridge, Highway and Transportation District, have enabled the Bay Area to absorb the growth that occurred between 1960 and 1981. The continued effectiveness of these agencies in guiding and managing growth depends on their ability to anticipate and prepare acceptable policies for future regional needs, and on the capability of the operating agencies to implement policies.

Within this regional planning framework, development is proposed in each of the region's nine counties. The regional agencies review comprehensive plans for individual jurisdictions and large development proposals that are subject to environmental review under CEQA to determine their conformance to approved regional plans.

Regional housing projections, prepared by ABAG, are presented in Table E-1, p. 275. The housing projections, and other ABAG projections of population and employment contained in Projections 79 (ABAG, January 1980), are based on assumptions concerning demographic and economic trends, local land use policies, and transportation infrastructure. Between 1980 and 1990, total Bay Area population and employment are expected to increase by 564,500 and 314,700, respectively. According to Projections 79, San Francisco resident population is expected to decline by about 9,600, and employment in the City is expected to increase by about 68,500.

The impact analysis in this report focuses on regional facility capacity available within the 1982-1990 planning horizon. Decisions as to when major capacity increases will be needed are made by implementing and operating agencies in the context of planning done by regional agencies.

The amount of physical development that can be absorbed in the Bay Area is constrained by the rate and amount of economic growth. Physical development occurs in response to perceived demand for the type of project to be built; if there is no perceived demand, physical development will not occur. For example, in the 1970s, regional shopping centers were proposed in San Mateo, Foster City and Redwood City. Only San Mateo's Fashion Island was built, because the central Peninsula could support only one additional regional shopping center in the contextual time frame.

Similarly, market forces limit the amount of office space that can be occupied in the Bay Area during a given forecast period because the demand for office space is finite. The amount of office space that can be occupied in the region during this decade is limited by many factors, particularly regional employment growth, which determines demand, which in turn determines the rate of development.

This relationship is important to the understanding of the potential amount of office space in San Francisco and the region; office space accommodates employment, it does not create it. If a large amount of speculative office space were to be built in Oakland, given the projected level of regional employment growth, it would satisfy a portion of the regional demand. The reduction in unmet demand would be accompanied by a lessening in the rate of development, so that not all of the proposed office space in San Francisco, for example, would be built. (This effect would be limited somewhat by demand for space at the local level, e.g., all companies desiring San Francisco office space would not necessarily be satisfied by office space in Oakland.) If more space were provided than needed, it would not be fully occupied. This report contains a worst-case analysis of cumulative development for downtown San Francisco because it assumes that all projects that are under formal review, approved, and under construction in downtown San Francisco would be built and fully occupied.

Employment growth will be distributed throughout the Bay Area where facilities to accommodate that growth -- including transit systems, infrastructure improvements, office space and housing -- exist, are used most efficiently, or are constructed.

TABLE B-2: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF AUGUST 6, 1982*

Projects under Formal Review 8/6/82

<u>Assessor's Block</u>	<u>Case No.</u>	<u>Project Name</u>
58	82.234ED	Roundhouse
112	81.258	Ice House Conversion (C)
136	81.245	955 Front at Green
176	81.673	Columbus/Pacific Savoy
228	81.610ED	569 Sacramento (C)
240	81.705ED	580 California/Kearny
265	81.195ED	388 Market at Pine
269	81.132ED	Russ Tower Addition
270	81.175ED	466 Bush
288	81.461ED	333 Bush (Campeau)
288	81.687ED	222 Kearny/Sutter
669	81.667ED	1361 Bush (C)
716	81.581ED	Polk/O'Farrell
3702	81.549ED	1145 Market
3703	81.494ED	1041-49 Market
3707	81.492ED	90 New Montgomery
3707	81.245C	New Montgomery Pl.
3708	81.493ED	71 Stevenson
3733	82.29E	832 Folsom
3760	81.386	401 6th
3776	81.59	Welsh Commons
3778	81.630ED	548 5th/Brannan
3781	82.99E	Greyhound Bus Terminal
3786	82.33E	655 5th/Townsend
3789	82.31EV	615 2nd/Brannan (C)
9900	81.63	Ferry Building Rehab
9900	81.63	- Pier One Development
9900	81.63	- Agriculture Building

Approved Projects 8/6/82

<u>Assessor's Block</u>	<u>Case No.</u>	<u>Project Name</u>
106	81.415ED	1299 Sansome
161	80.191	Mirawa Center
164	81.631D	847 Sansome
164	81.573D	50 Osgood Place
166	CU81.7	222 Pacific (C)
166	80.15	750 Battery
206	81.165D	401 Washington at Battery

(continued on next page)

TABLE B-2: Continued*

Approved Projects 8/6/82 (continued)

<u>Assessor's Block</u>	<u>Case No.</u>	<u>Project Name</u>
227	80.296	Bank of Canton
261	81.249ECQ	333 California
262	81.206D	130 Battery
267	81.241D	160 Sansome
268	81.422D	250 Montgomery at Pine
271	81.517	453 Grant
271		582 Bush
294	82.870	44 Campton Place
311	82.120D	S.F. Federal
351	DR79.24	Mardikian/1170-1172 Market
3512	82.14	Van Ness Plaza
3518	81.483V	291 10th St.
3705	80.315	Pacific III Apparel Mart
3709	81.113ED	Central Plaza
3715	82.16EC	121 Steuart
3717	80.349	Spear/Main (160 Spear)
3717	82.82D	135 Main
3722	81.548DE	466 Clementina (C)
3722	81.417ED	144 Second at Minna
3724	81.102E	Holland Ct. (C)
3729	82.860	774 Tehama
3733	81.2	868 Folsom
3735	80.106	95 Hawthorne (C)
3738	DR80.5	315 Howard
3741	82.203C	201 Spear
3749	81.18	Marathon - 2nd & Folsom
3751	77-220	National Maritime Union
3752	77-220	Office Bldg. (YBC SB-1)
3763	81.287V	490 2nd at Bryant (C)
3763	81.381	480 2nd at Stillman (C)
3775	81.147V	338-340 Brannan (C)
3776	81.693EV	539 Bryant/Zoe
3788	81.296Z	690 2nd/Townsend (C)
3787	81.306	252 Townsend at Lusk
3789	81.552EV	625 2nd/Townsend (C)
3794	81.569EV	123 Townsend
3803	81.244D	China Basin Expansion

Projects under Construction 8/6/82

<u>Assessor's Block</u>	<u>Case No.</u>	<u>Project Name</u>
163	81.1	901 Montgomery
164	81.251D	936 Montgomery-(disco)

(continued on next page)

TABLE B-2: Continued*

Projects under Construction 8/6/82 (continued)

<u>Assessor's Block</u>	<u>Case No.</u>	<u>Project Name</u>
167		Golden Gateway III
196		736 Montgomery
196	CU79.49	Pacific Lumber Co.
208	81.104EDC	Washington/Montgomery
237	DR80.6	353 Sacramento (Daon)
239	DR80.1	456 Montgomery
240	DR80.16	550 Kearny
263	CU79.12	101 California
287	81.550D	Sloane Building (C)
288	DR80.24	101 Montgomery
289	81.308D	One Sansome
292	DR79.13	Crocker National Bank
312	79.370	50 Grant
351	79.133	U.N. Plaza
762		Opera Plaza
3702	81.25	1155 Market/8th
3708	80.34	25 Jessie/Ecker Square
3709	80.36	Five Fremont Center
3712	79.11	Federal Reserve Bank
3715		141 Steuart
3717	79.236	101 Mission at Spear
3717		150 Spear
3718	79.12	Pacific Gateway
3724		Yerba Buena West
3735		Convention Plaza

* Includes all office projects in the greater downtown area and the South of Market area for which a Preliminary Draft EIR has been submitted to the City for review or for which plans are well defined, and all office projects in redevelopment areas that are under construction or for which Land Disposition Agreements have been approved. It does not include projects in the Rincon Point - South Beach or Yerba Buena Center Redevelopment Areas for which no Land Disposition Agreements have been approved by the San Francisco Redevelopment Agency Commission, as it is not possible to know what development will be approved in these areas. It does not include Mission Bay as no formal proposal has been submitted to the City and the project is still in early planning stages.

** The letter (C) after a project refers to a conversion (generally industrial and/or warehouse space to office space).

SOURCE: Department of City Planning

TABLE B-3: GROSS SQUARE FEET OF CUMULATIVE OFFICE AND RETAIL DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF AUGUST 6, 1982*

Status of Project	Office (Gross Sq. Ft.)		Retail (Gross Sq. Ft.)	
	Total New Constr.	Net New Constr.	Total New Constr.	Net New Constr.
Under Formal Review	4,220,970	3,801,570	310,650	249,150
Approved	5,428,350	4,862,600	187,850	150,310
Under Construction	<u>7,753,050</u>	<u>7,427,350</u>	<u>260,250</u>	<u>136,000</u>
GRAND TOTALS	17,402,370	16,091,520	758,750	535,510

* The list of projects shown in Table B-2 and the development totals shown in Table B-3 include all office projects in the greater downtown area and the south of Market area that are under construction or have been approved, and all projects for which a Preliminary Draft EIR has been submitted to the City for review or for which plans are well defined, and all office projects in redevelopment areas that are under construction or for which Land Disposition Agreements have been approved by the San Francisco Redevelopment Agency Commission. Projects that were not definitive and/or appear to be inactive or withdrawn by the project sponsor were not included in the cumulative analyses.

Hotel projects have not been included in the cumulative analyses because hotel uses have different peaking characteristics from office buildings and generally do not significantly affect peak-hour traffic or transit. Residential projects have not been included because residential travel in the downtown is generally in the contra-commute direction during peak-hours and because the office trip generation rate and modal split distribution are predicated on the assumption that housing would be available in the City. Thus inclusion of residential projects would be double counting of project generated travel.

Two redevelopment areas (Yerba Buena Center and Rincon Point - South Beach) and one private development (Mission Bay) are located in or near the greater downtown area. In the redevelopment areas the majority of building sites do not yet have Land Disposition Agreements (LDA) approved. Until such time as specific LDA's are approved, no estimate of travel demand can be made (thus, parcels for which no LDA exists have not been included in the cumulative analyses). Development in the Yerba Buena Center (YBC) Redevelopment Area will be in accordance with the YBC Redevelopment Plan, as amended. Possible land uses that would be in accordance with the Yerba Buena Center Redevelopment Area Plan include commercial entertainment, convention facility (in place), cultural, downtown support service, exhibit/ballroom space, hotel rooms, institutional, light industry, market-rate dwelling units, subsidized dwelling units, office, park or plaza, pedestrian concourse, parking and, retail./1/ Possible land uses in the Rincon Point - South Beach Redevelopment Area include hotel, housing, office, open space, public parking, retail and, warehouse uses./2/ Mission Bay has not been included in the cumulative analyses as no application has been submitted to the City and it is uncertain what formal proposal may be made.

(continued)

TABLE B-3: Continued

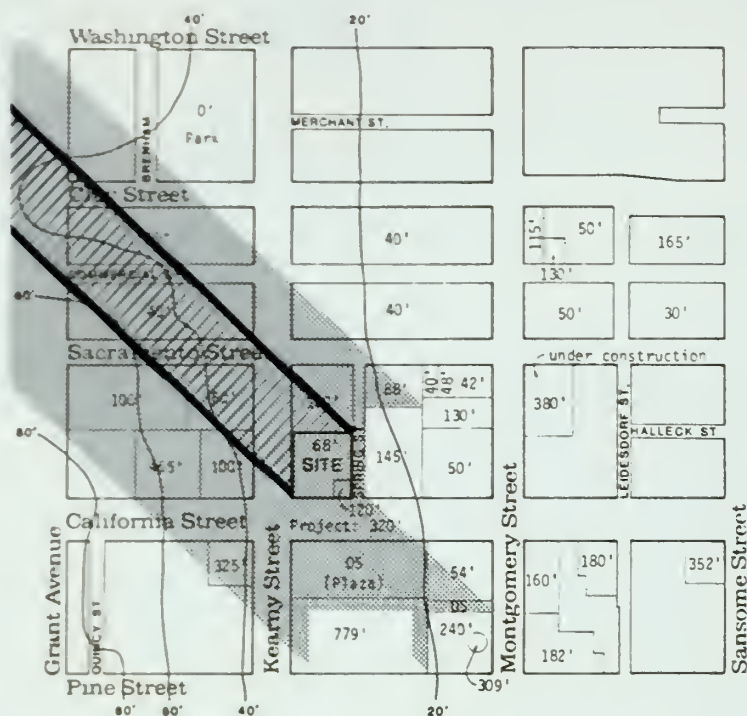
NOTES

/1/ Land uses from Draft Second Supplement Yerba Buena Center Final Environmental Impact Report, San Francisco Department of City Planning, May 28, 1982.

/2/ Land uses from Rincon Point - South Beach Redevelopment Area, San Francisco, California, Final Environmental Impact Report/Environmental Impact Statement, San Francisco Department of City Planning, certified November 5, 1980.

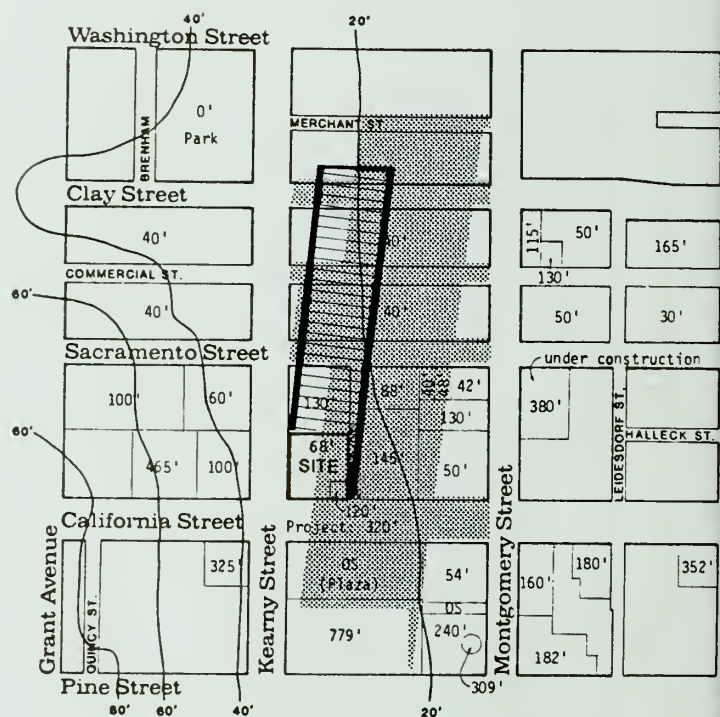
SOURCE: Department of City Planning

APPENDIX C: SHADOW DIAGRAMS

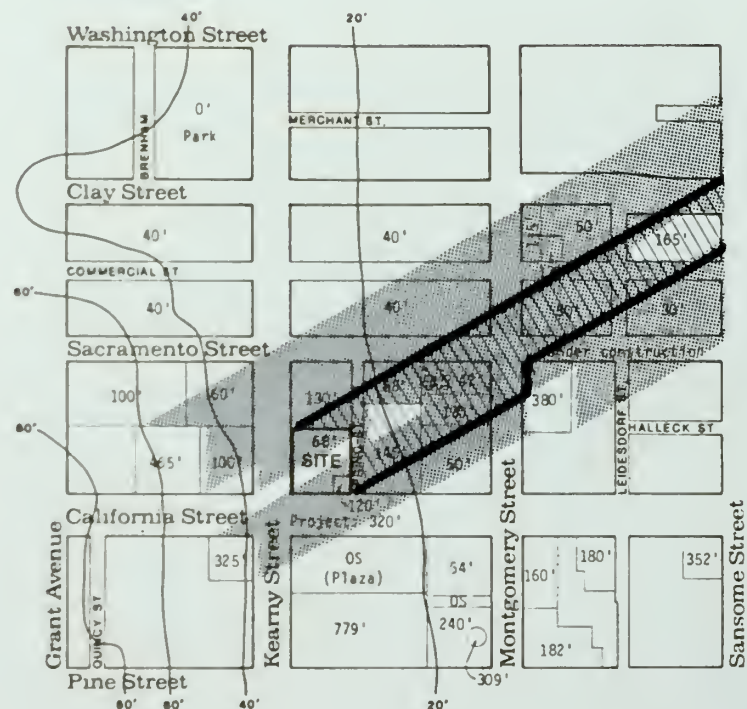


8 A.M.

12 Noon



4 P.M.

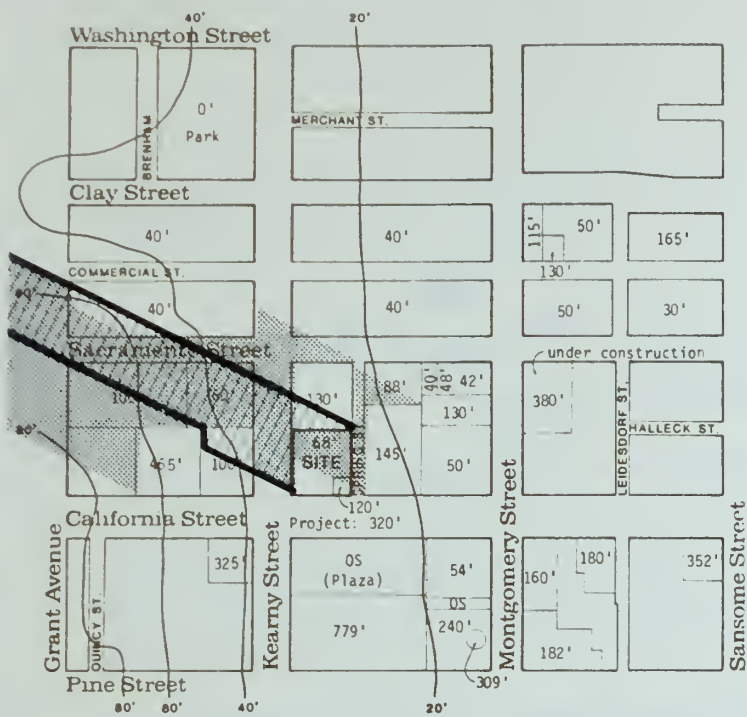


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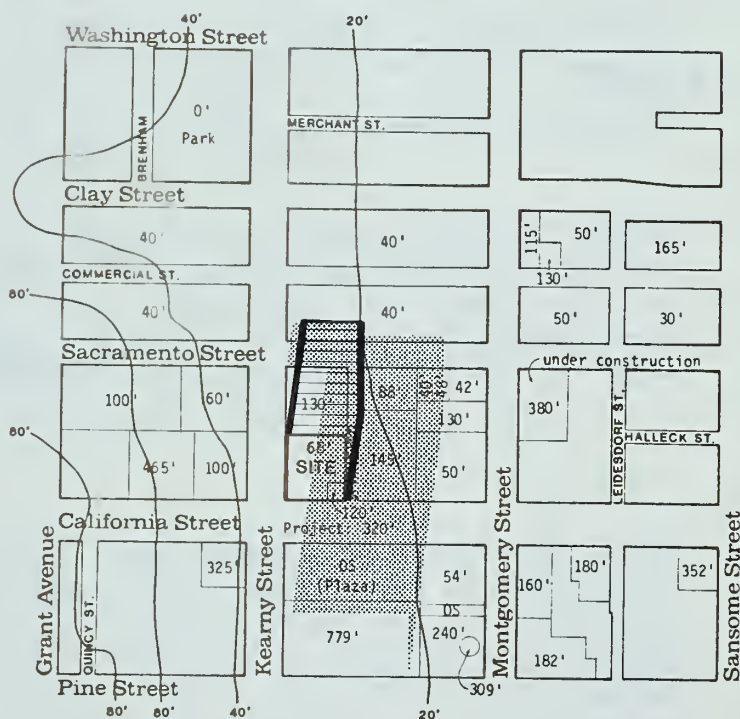
-  Existing Shadow
-  Project Shadow

FIGURE C1: Existing and Project Shadow Patterns in Vicinity of Project, December 22nd

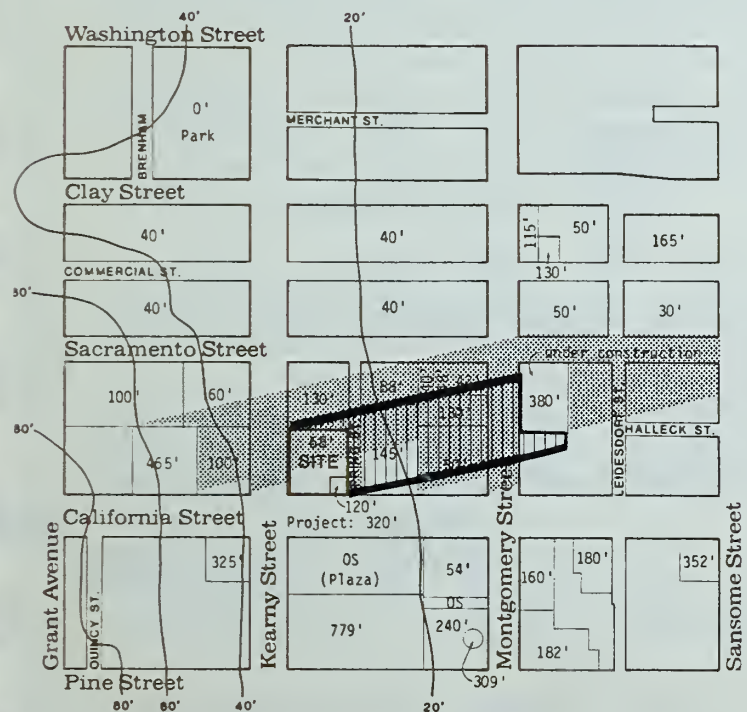
SOURCE: Environmental Science Associates, Inc.



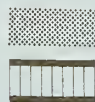
12 Noon/1 P.M.



4 P.M./5 P.M.



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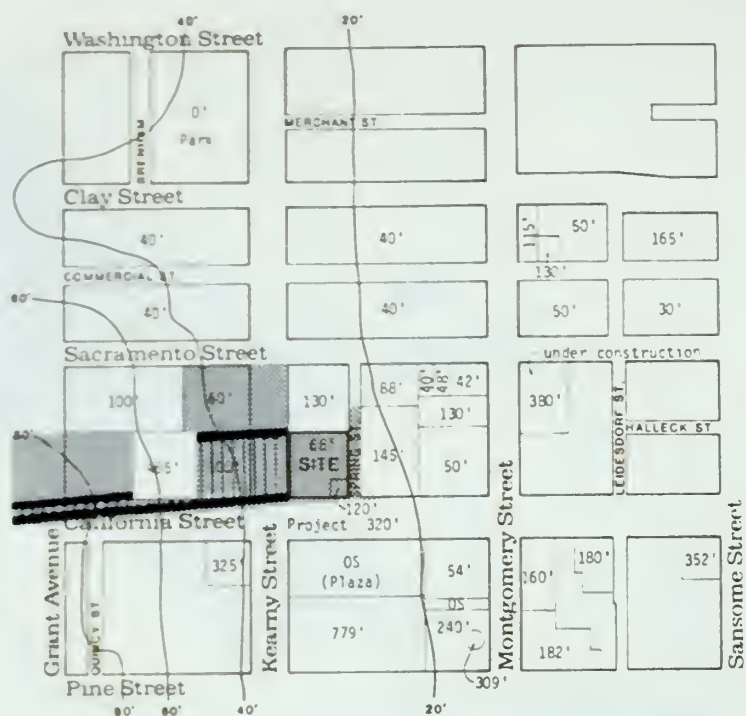
Existing Shadow

Project Shadow

Note: September shadows are Daylight Savings Time and therefore one hour later.

FIGURE C2: Existing and Project Shadow Patterns in Vicinity of Project, March 21st/ September 22nd

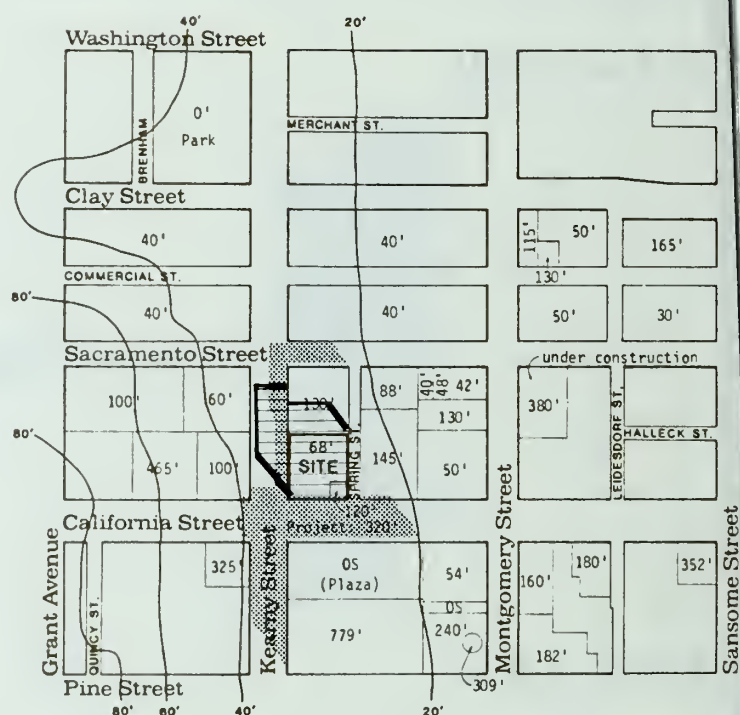
SOURCE: Environmental Science Associates, Inc.



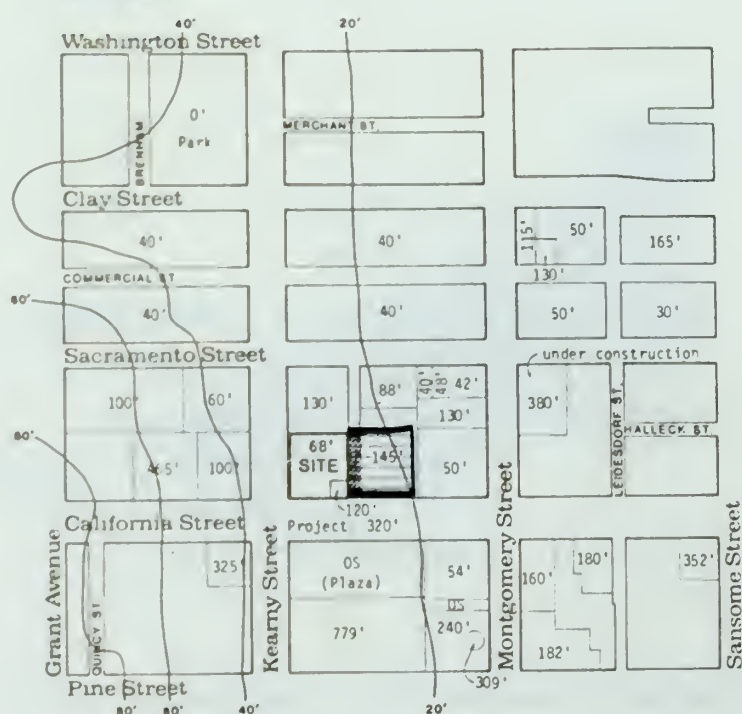
8 A.M.



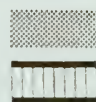
12 Noon



4 P.M.



LEGEND



Existing Shadow

Project Shadow

Note: Daylight Savings Time

FIGURE C3: Existing and Project Shadow Patterns in Vicinity of Project, June 22nd

SOURCE: Environmental Science Associates, Inc.

APPENDIX D: WIND-TUNNEL STUDY

580 California Street Office Building
Initial Wind-Tunnel Study
prepared by Dr. Bruce White, Davis, California

I. MODEL AND WIND-TUNNEL FACILITIES

A 1:50 scaled model of the downtown San Francisco area surrounding the proposed building site for several blocks in all directions was provided by Environmental Science Associates, Inc. The model was capable of having three figurations (the existing setting, proposed project, and Alternative One) each available for separate wind-tunnel testing.

An environmental wind tunnel was built for testing natural atmospheric boundary layer flows past surface objects such as buildings and other structures. The tunnel has an overall length of 22 meters (m) (72 ft.), a test section of 1.22 m (4 ft.) wide by 1.83 m (6 ft.) high, and has an adjustable false ceiling. Wind speeds within the tunnel can be varied from 1 to 4 meters per second (m/s) or 4.8 to 19.3 miles per hour (mph).

The atmospheric boundary layer flow over the downtown area was simulated by an upwind network of turbulence generators. The wind tunnel's false ceiling was adjusted to provide a zero-pressure-gradient downstream flow. The adjustment of the flow to zero-pressure-gradient flow is known to properly model atmospheric boundary layers near the surface of the earth. The long flow development length allows a naturally turbulent boundary layer to develop and properly models the full-scale flow.

II. TESTING PROCEDURE

The wind study was divided into two parts: flow visualization and wind speed measurements. The flow visualization observations were performed by injecting a continuous stream of smoke at various near-surface locations. The subsequent motion of the smoke was recorded, and prevailing wind directions were determined. Wind speed measurements were made at 21 surface locations using a hot-wire anemometer, an instrument that directly relates rates of heat transfer by electronic signals. The hot-wire signals are proportional to the magnitude and steadiness of the wind. Both the mean wind speeds and corresponding turbulence intensities were measured. Thus, high wind speeds and gustiness (large variable changes in wind speeds over short changes in time) could be detected. Hot-wire measurements made close to the surface have an inherent uncertainty of $\pm 5\%$ of the true values.

Calibration measurements were made before and after each series of hot-wire experiments. The calibration was accomplished by means of a Thermo-System Incorporated (TSI) Model #1126 hot-wire anemometer calibrator especially designed for low-wind speeds. The calibration is accurate to $\pm 1\%$. The flow above the model was adjusted to nearly the same wind speed of 3.38 m/s (11.1 ft/sec or 7.56 mph) for all experiments. The ratio of near-surface speed to freestream wind speed was calculated from the hot-wire measurements and is presented on the attached figures.

Experiments were performed for three prevailing wind directions (westerly, northwesterly, and southwesterly) for the existing setting, proposed project, and Alternative One. These wind conditions are the most common in San Francisco, and are

therefore the most representative for evaluation purposes. All hot-wire measurements were taken at the same series of surface points around the building site for all three wind directions and the three building settings.

III. TEST RESULTS AND DISCUSSION

The measured wind speeds are expressed as normalized percentage of the freestream wind-tunnel speed where 1.0 represents a wind speed equal to 100% of the freestream value. The numerical ratios (called wind speed ratios) displayed on the following figures can be approximately interpreted by using the following scale presented in Table D-1. The assessment of wind impact on the site vicinity is preliminary and should be construed only as an estimate of the projected actual wind environment. The scale presented in Table D-1 is subjective.

TABLE D-1: RELATIVE INTENSITY OF SURFACE WINDS

<u>Intensity of Wind Speed</u>	<u>Wind Speed Ratio or Normalized Percentage of Freestream Speed</u>
Low	0.00 - 0.19
Moderately low	0.20 - 0.29
Moderate	0.30 - 0.49
Moderately high	0.50 - 0.69
High	0.70 - 1.00
Very high	over 1.00

It should be noted that the plotted values are not actual wind speeds, but ratios. Thus, a point having "very high" wind speed could still experience light winds on a near-calm day. Likewise, a point found to have "low" wind speed could experience relatively high winds on a windy day.

West Wind

Setting. The near surface wind speeds are low (wind speed ratios of less than 0.19) at all measured locations except for a moderately low wind (wind speed ratio of 0.22) occurring on the north side of the Pine-Kearny Sts. intersection. Other wind features that characterize the existing wind environment for the setting are: (a) The Portsmouth and St. Mary's Squares experience low winds. (b) Winds west of Kearny St. on Pine and Bush Sts. are easterly and they are created by a large recirculating wind flow that is formed off of the downwind (east side) of Knob Hill. (c) A large turbulent wake is created downwind of the Bank of America Headquarters Building which extends many blocks downwind of the building.

Impact of project. The presence of the proposed building would create, in general, the same wind environment as presently exist. There would be, however, an effective 18% increase in wind speeds occurring at the intersection of California and Kearny Sts. Note, this increase would still result in low winds occurring at the intersection.

Alternative One. The alternative building would result in essentially the same wind environment as presently exists with a strong majority of measured winds remaining low.

The above results would be due to the presence of many massive buildings directly downwind of the building site. Such a situation results in relatively low winds around the building site. This is observed on the wind speed ratio figures for all conditions (setting, project and Alternative One).

Northwest Wind

Setting. The near surface wind speeds are low and moderately low at all measured locations except for a southerly moderate wind along Kearny St. just west of the existing building. Other wind features that characterize the wind environment are: (a) The Portsmouth and St. Mary's Squares experience low and moderately low winds. (b) Two vertical vortices are formed off of the northeast and southwest corners of the 650 California St. Building. These vertical vortices cause a rapid acceleration of wind along Kearny St. just west of the existing building as evidenced by a change in wind speed ratios from 0.13 at the intersection of Sacramento and Kearny Sts. to 0.44 and 0.31 alongside the existing buildings. Also, the vortices cause easterly winds on California St. west of Kearny St. in the wake of the 650 California St. Building. (c) A large turbulent wake is created downwind of the Bank of America Headquarters Building which extends many blocks downwind of the building.

Impact of project. The presence of the project would create the following changes in the wind environment: (a) two vertical vortices would be formed off of the northeast and southwest corners of the proposed building and would create swirling winds on California St. (just south of the proposed building). However, these winds would be low and moderately low. (b) There would be no change in the wind patterns on Portsmouth and St. Mary's Squares. (c) There would be increased wind speeds, from low to moderately low, along California St. and at the intersection of California and Kearny Sts. (d) There would be a decrease of winds along Kearny St. just west of the proposed building due to an altering of the vertical vortices formed off of the 650 California St. Building. This effect would lessen the rapid acceleration the wind experiences under existing conditions.

Alternative One. The presence of the alternative building would create the following changes in the wind environment of the site vicinity, in addition to the effects described for the project: (a) The shorter building height of the alternative building would increase wind speeds on the south side of California St. across from the site (from 0.20 to 0.29 wind speed ratios). (b) There would be an increase in wind speed ratios from 0.17 to 0.28 at the mid-block location south of California St. (c) There would be an approximate 10% increase in winds on California St. west of Kearny St.

Southwest Winds

Setting. The near surface wind speeds are low and moderately low at many measured locations except for winds occurring along California St. where the winds are moderate and moderately high. This phenomenon is due to preferential channeling of winds along California St. Also, at the northwest corner of the Bank of America Headquarters Building a moderate wind with wind speed ratio of 0.48 exists due to turning of the wind from Kearny St. Other wind features that characterize the wind environment are: (a) Low and moderately low winds occurring on Portsmouth and St. Mary's Squares. (b) two vertical vortices formed off of the northeast and southwest corners of the 650 California St. Building. (c) Moderate and moderately high winds occurring at the intersection of California and Kearny Sts., representing the highest street level wind speeds observed at any location under existing conditions.

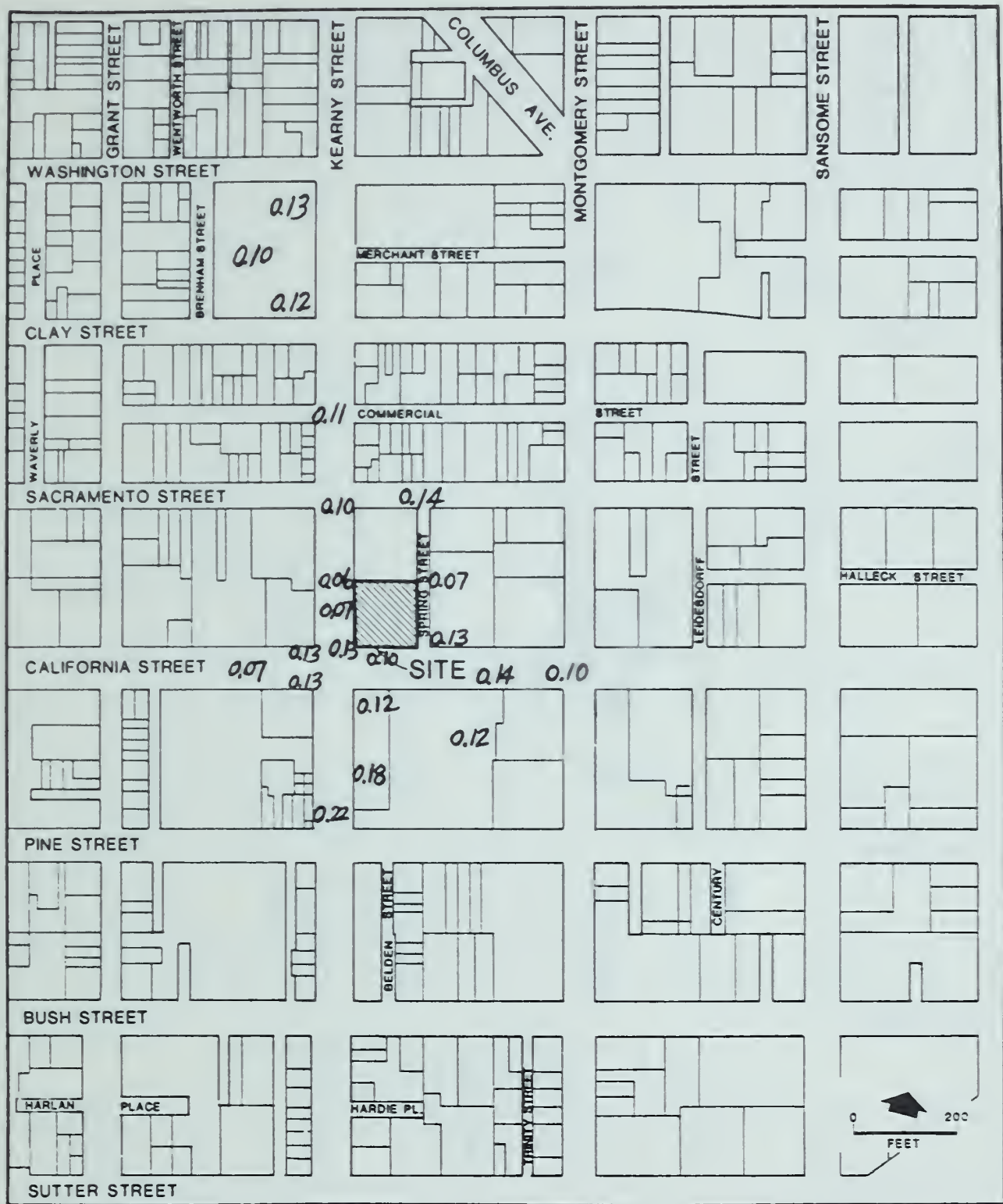
Impact of project. The presence of the proposed building would create the following changes in the wind environment: (a) The winds at the intersection of Sacramento and

Kearny Sts. would more than double from low to moderate winds (from 0.13 to 0.31 wind speed ratios). (b) The Portsmouth and St. Mary's Squares winds would remain the same. (c) There would be less wind along California St. at street level, due to a diverting of winds above the street; (d) The two vertical vortices formed off of the 650 California St. Building would not be present since much of the wind would be directed over the proposed building.

Alternative One. The presence of the alternative building would result in essentially the same wind patterns as for the proposed setting.

IV. MITIGATION MEASURES

The most undesirable changes in the wind environment due to the presence of the proposed building would occur along California and Kearny Sts. adjacent to the site, and at the intersection of Sacramento and Kearny Sts. for the northwesterly and southwesterly winds, respectively. Mitigating measures that should substantially reduce pedestrian discomfort along both Kearny and California Sts. along the proposed building would be the construction of small structures that could function as windbreaks along the sidewalks. They could include, but are not limited to, mature street trees, kiosks for newspapers, flower vendors, telephone booths, or low (10-15 ft. high) streetside planters along California and Kearny Sts. on the block of the proposed building.



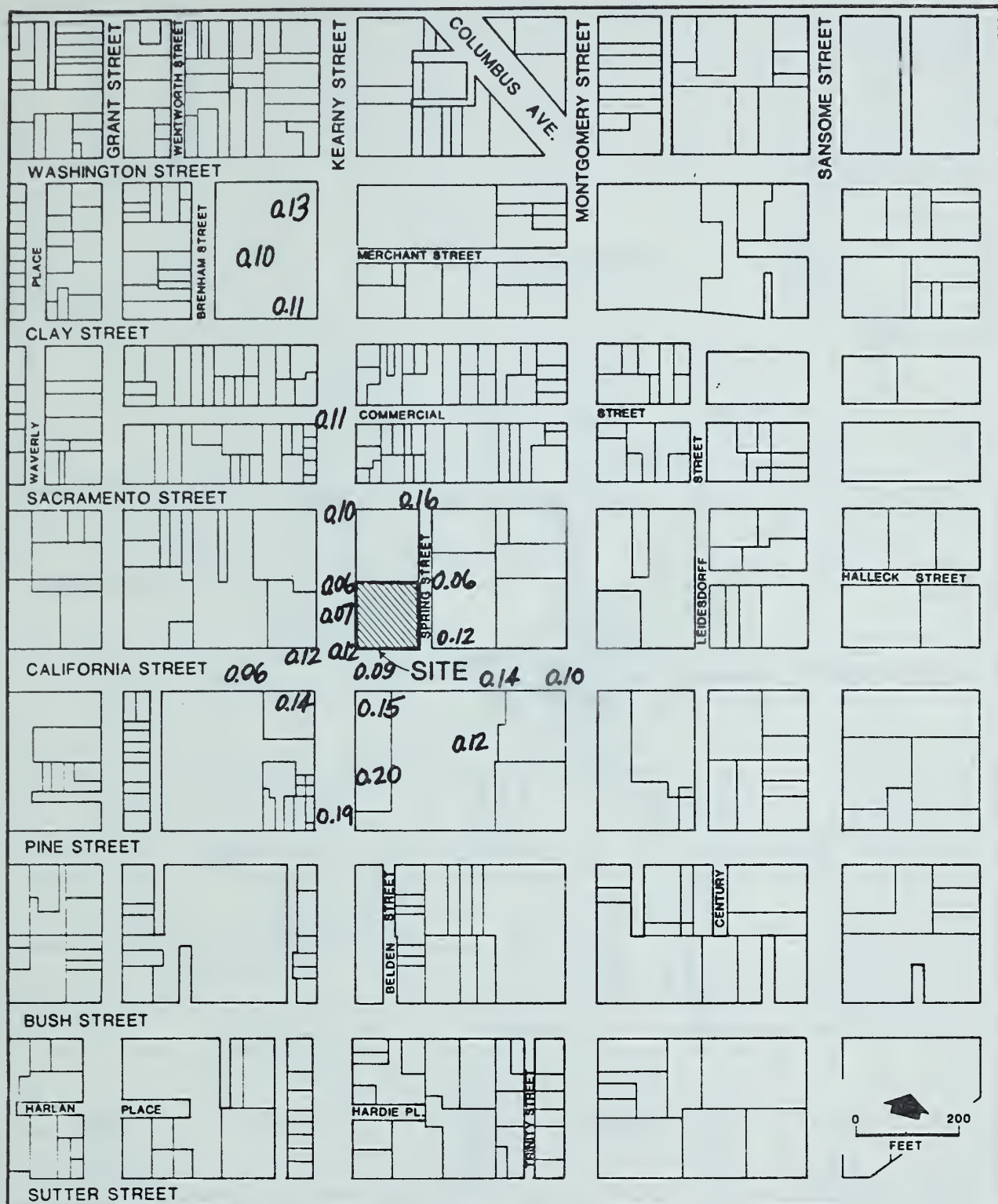
LEGEND



Project Location

FIGURE D1: Wind Speed Ratios
for West Wind
- Existing

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.



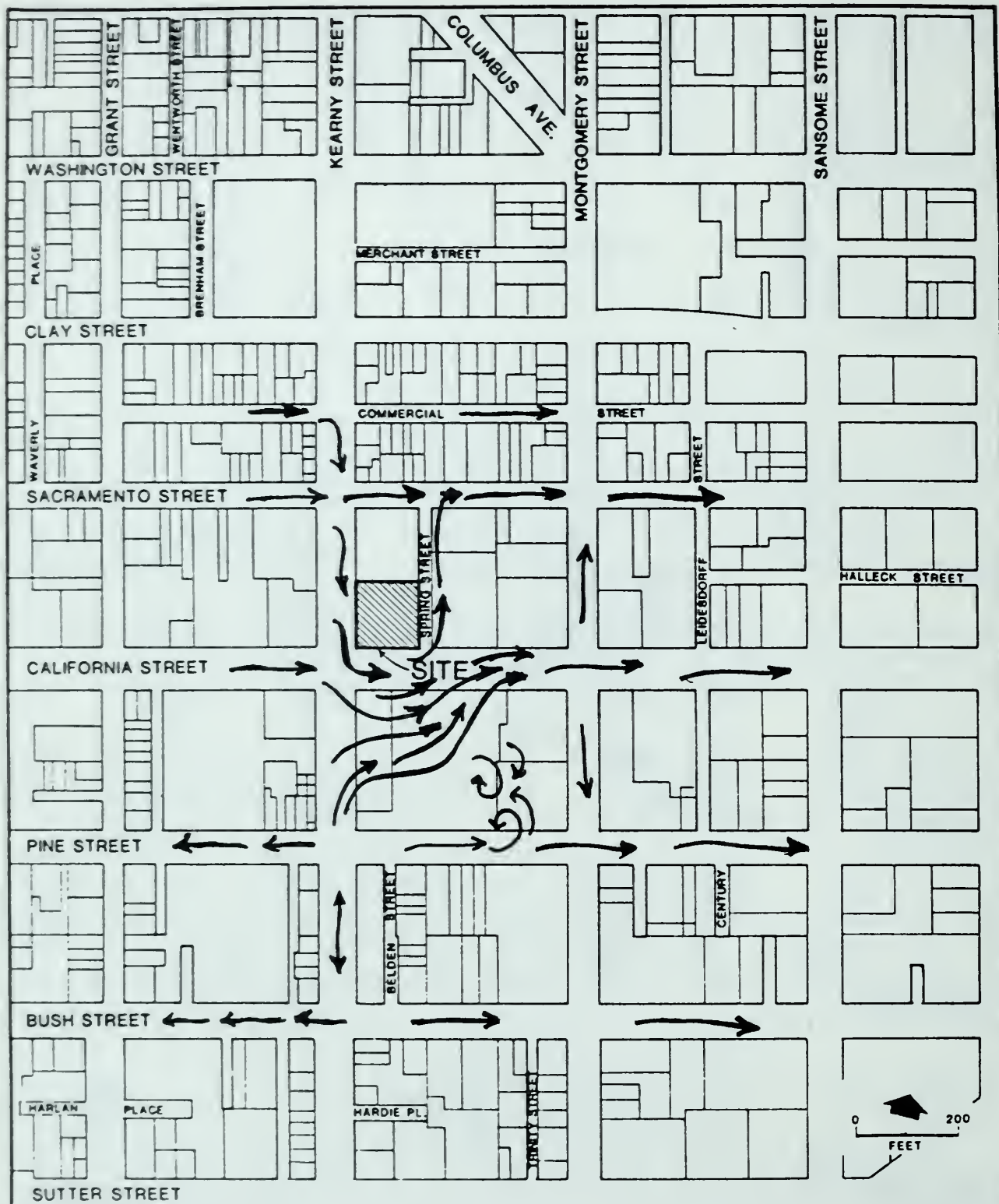
LEGEND



Project Location

**FIGURE D3: Wind Speed Ratios
for West Wind
– Alternative One**

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.

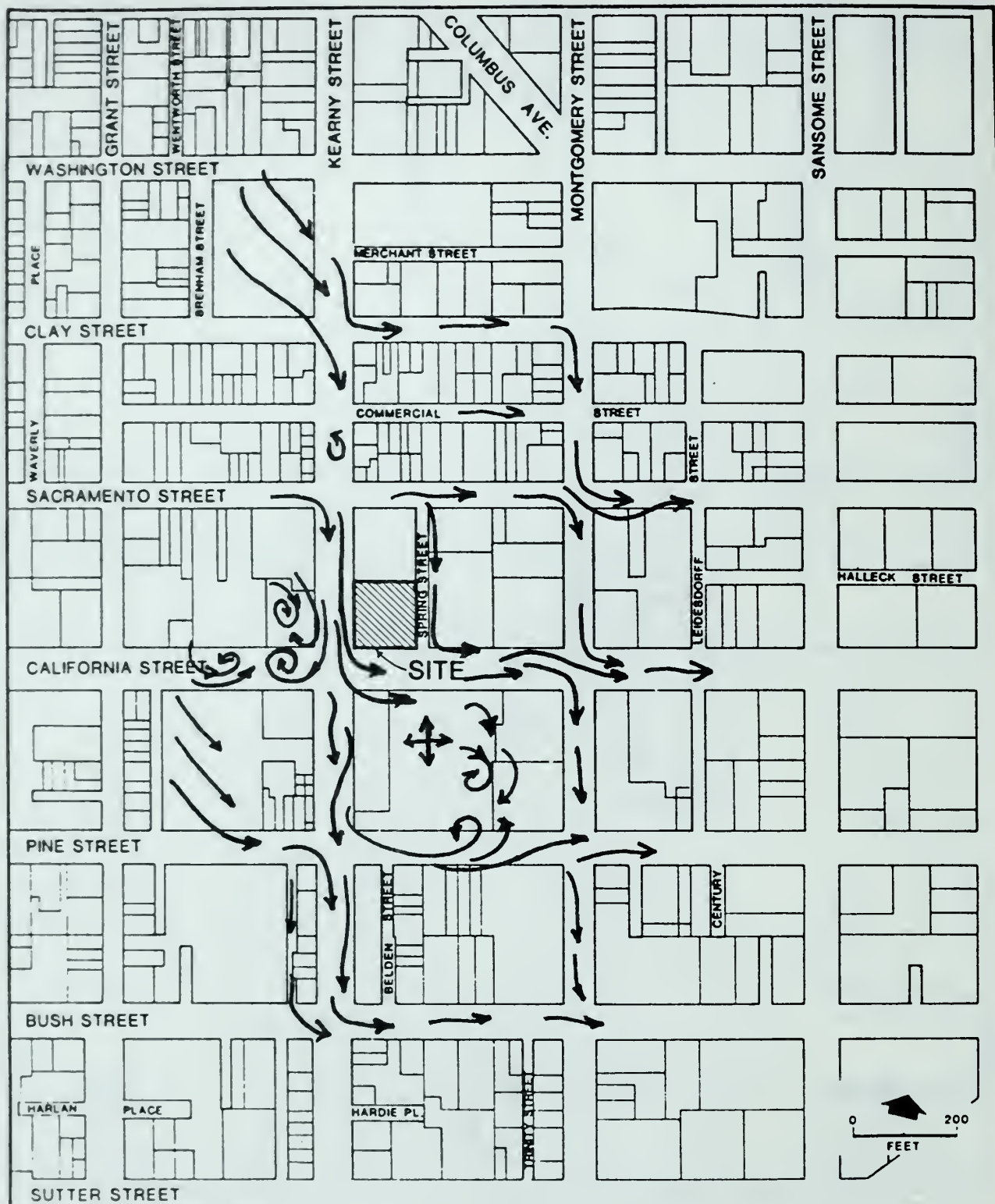


LEGEND

 Project Location

FIGURE D4: Wind Flows for
West Wind -
Existing, Project and
Alternative One

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.



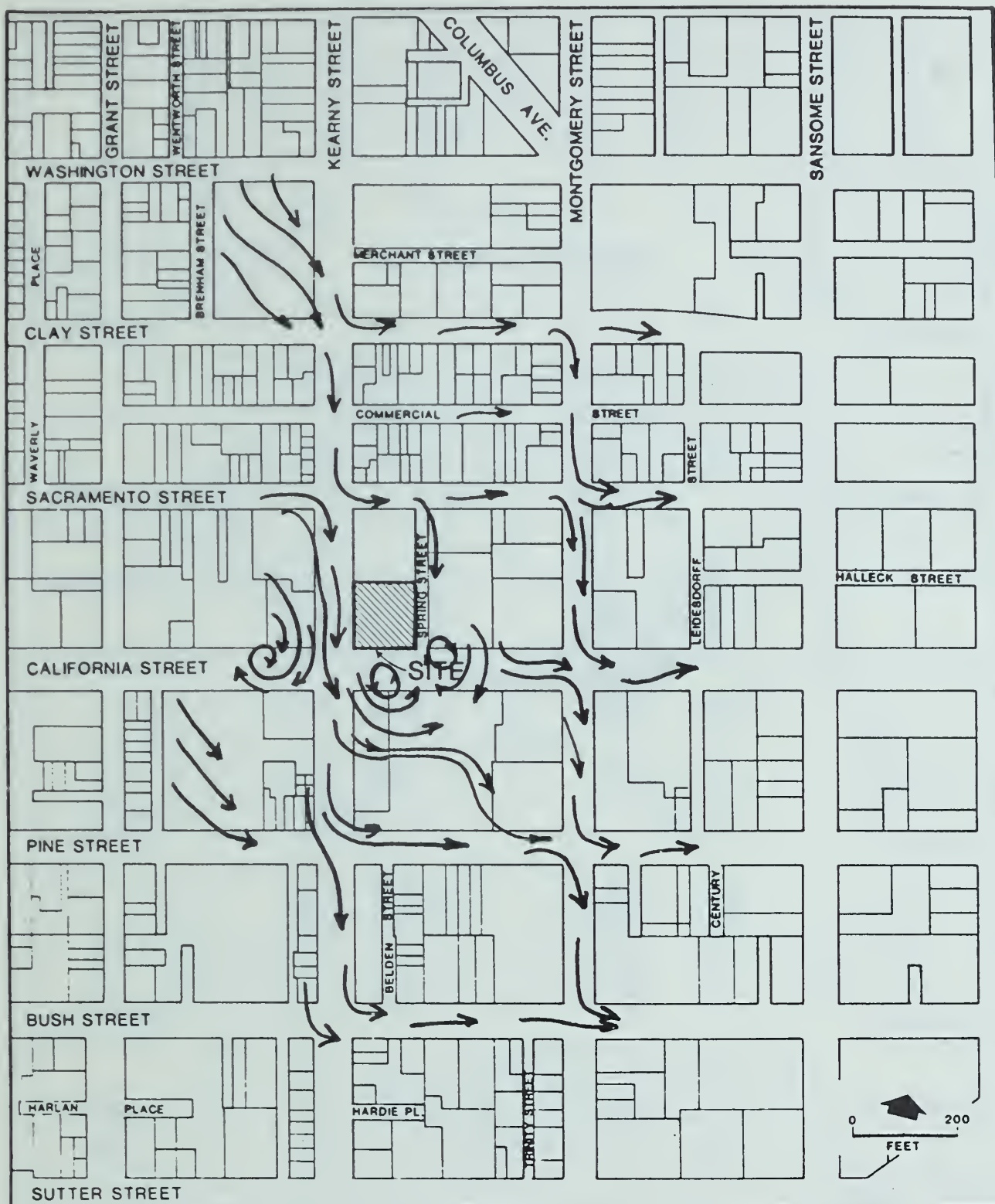
LEGEND



Project Location

FIGURE D8: Wind Flows for
Northwest Wind
- Existing

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.



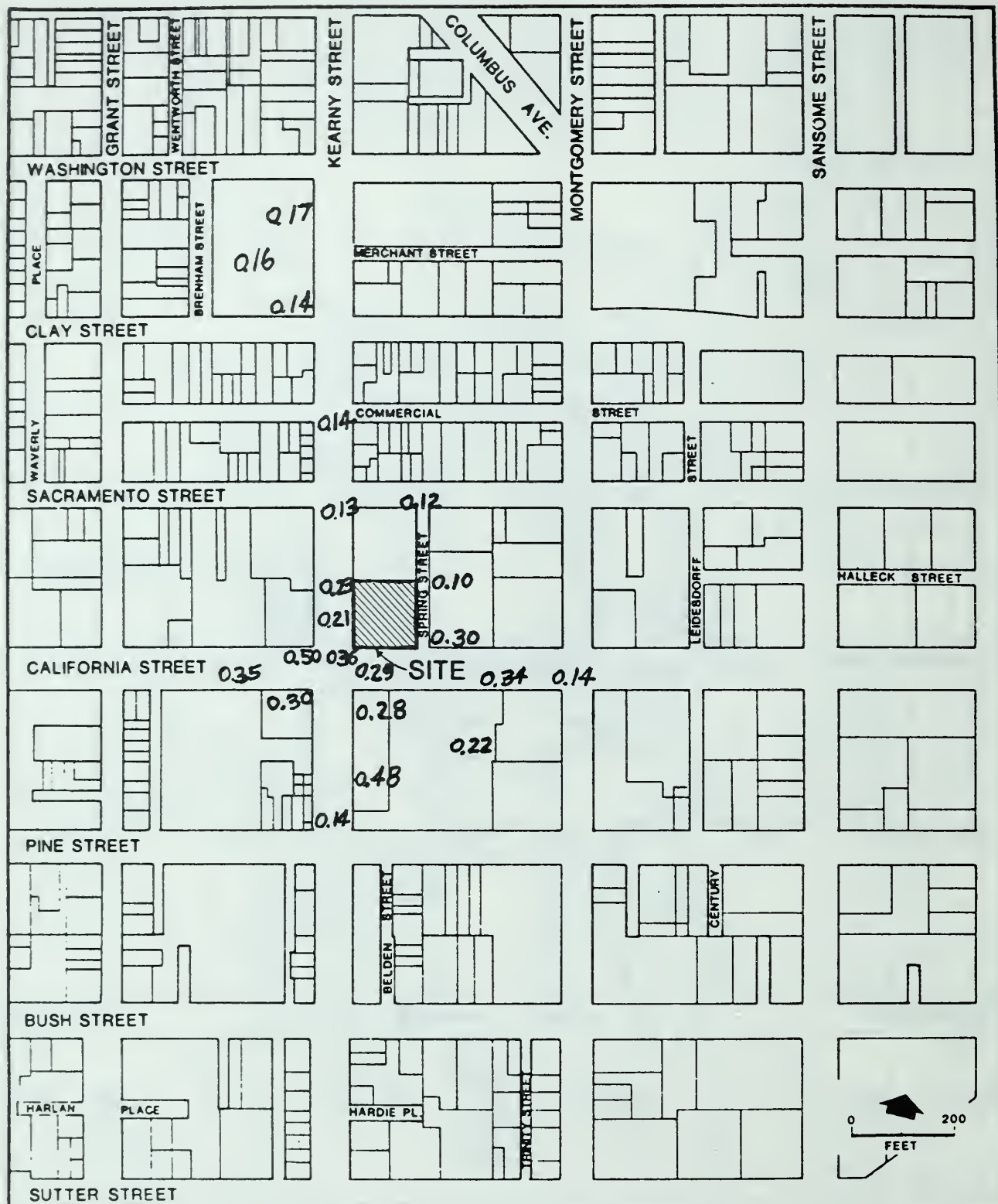
LEGEND



Project Location

**FIGURE D9: Wind Flows for
Northwest Wind
- Project and
Alternative One**

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.

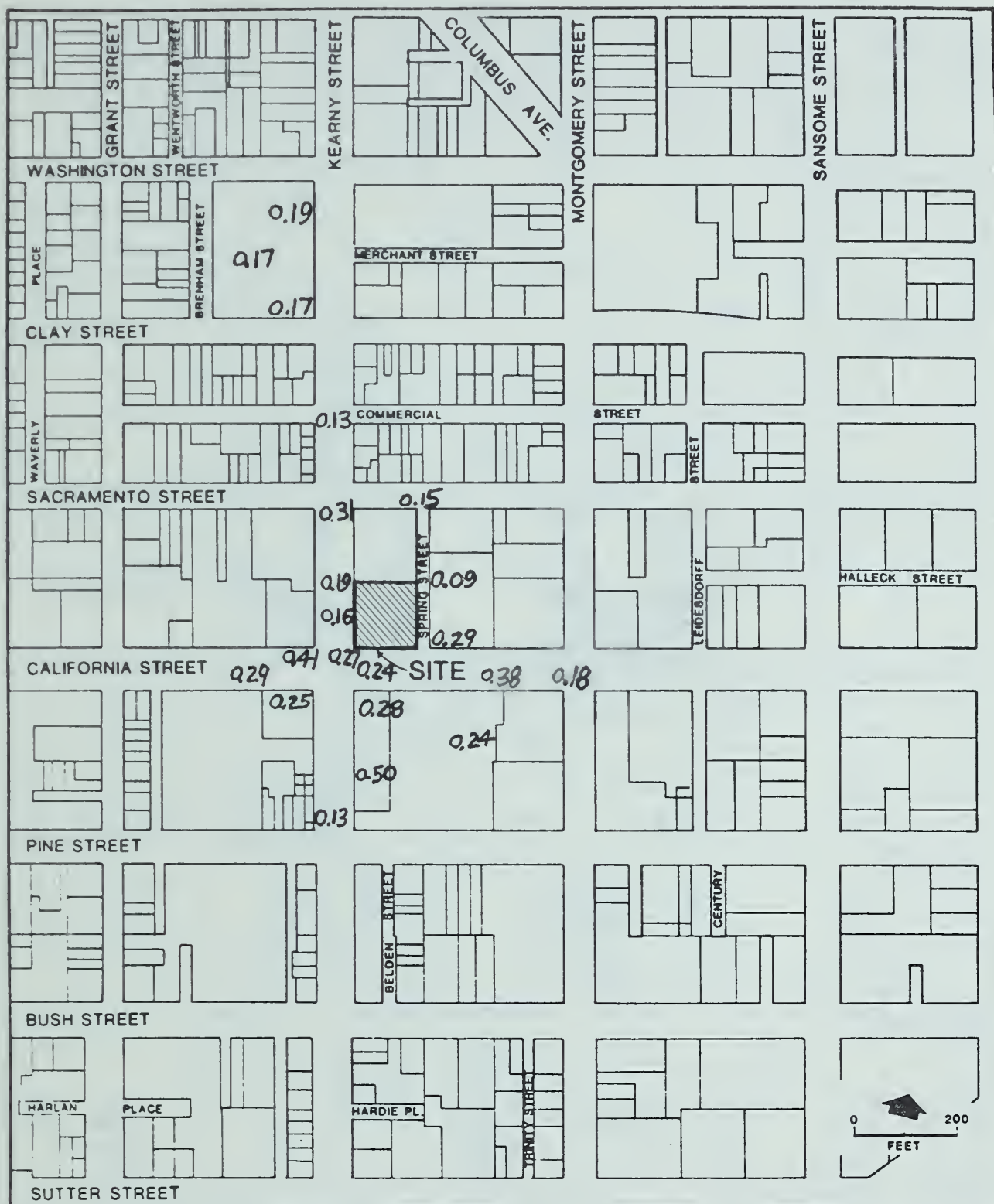


LEGEND

 Project Location

**FIGURE D10: Wind Speed Ratios
for Southwest Wind
- Existing**

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.



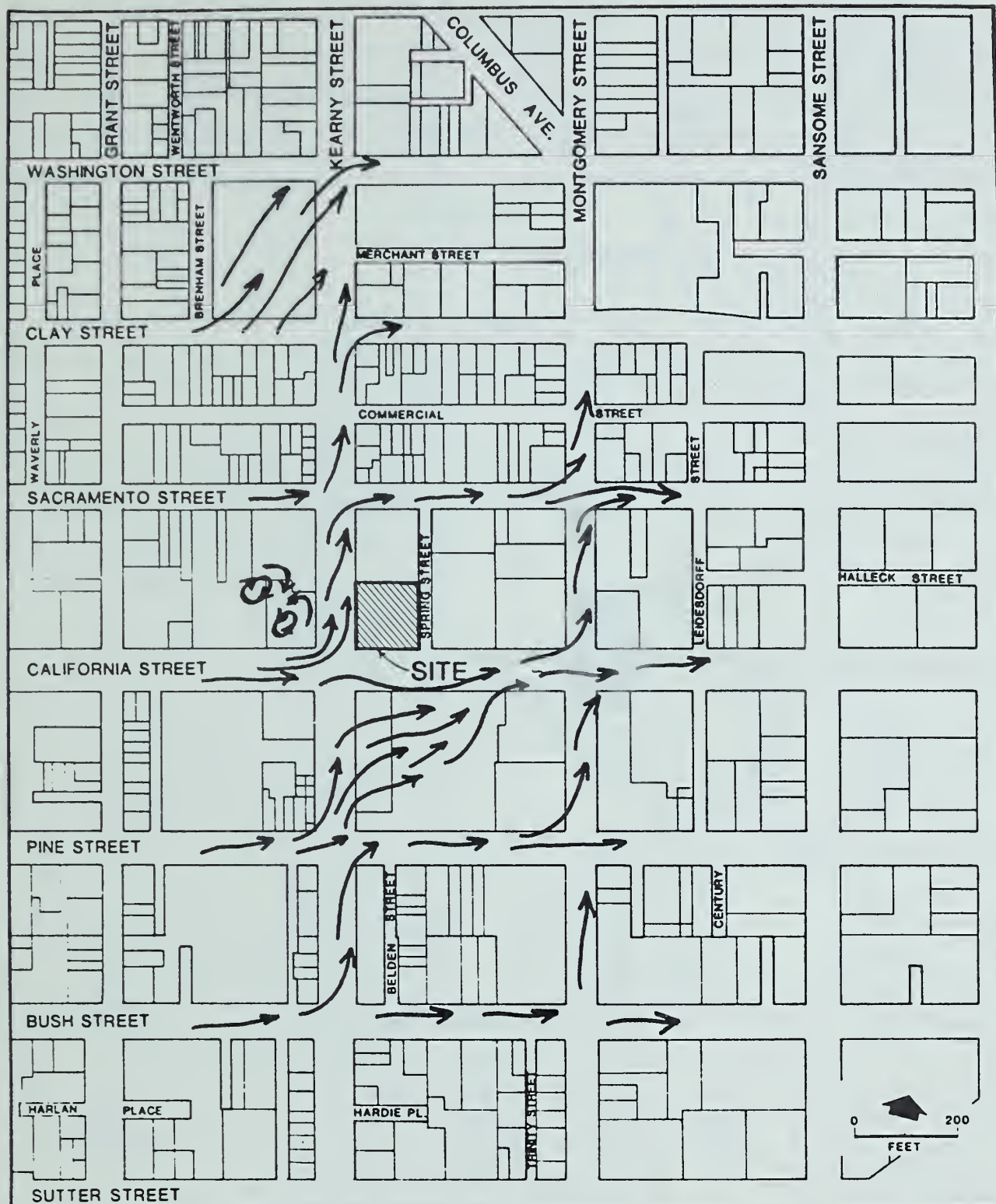
LEGEND



Project Location

FIGURE D11: Wind Speed Ratios
for Southwest Wind
- Project

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.

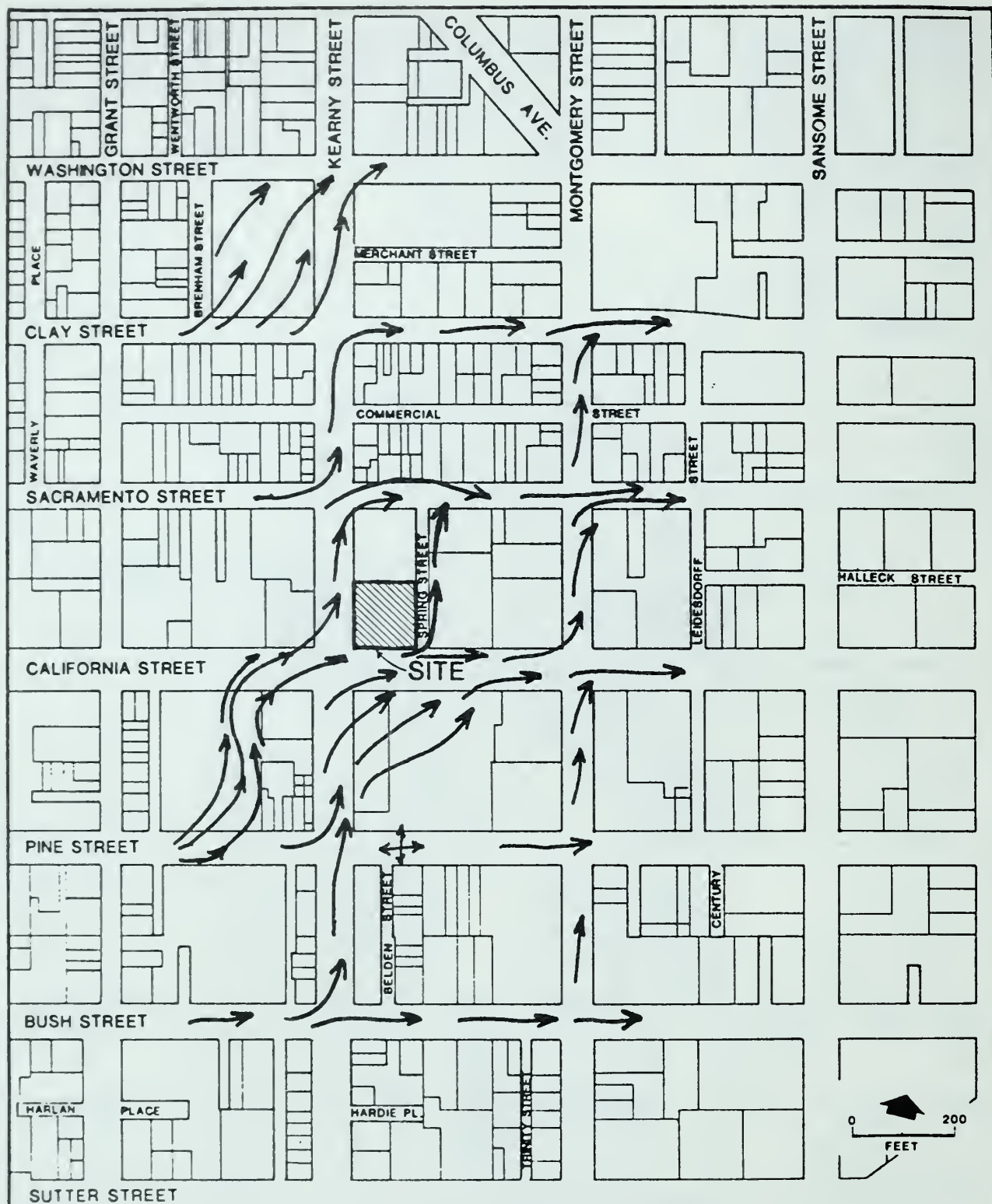


LEGEND

 Project Location

**FIGURE D13: Wind Flows for
Southwest Wind
- Existing**

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.



LEGEND

 Project Location

FIGURE D14: Wind Flows for
Southwest Wind
– Project and
Alternative One

SOURCE: Dr. Bruce White and
Environmental Science Associates, Inc.

APPENDIX E: EMPLOYMENT, HOUSING AND FISCAL FACTORS

TABLE E-1: PROJECTED EFFECTS OF DOWNTOWN OFFICE DEVELOPMENT ON REGIONAL HOUSING MARKETS, 1980-85

	Residency of S.F. Office Employees Percent	Project Demand in 1985 Number of Households	Cumulative Demand 1982 to 1990(c)		Net Housing Stock Growth 1982-1990(d) No. Units	Demand as a Percent of Growth 1982 to 1990 Project Cumulative
			Number of Employees	Number of Households		
San Francisco (a)	40 & 15-30	145 to 295	9,700 to 25,800	6,900 to 14,700	12,000	0.3 to 0.7 57.5. to 119.2
Peninsula (b) (San Mateo and Santa Clara Cos.)	18	185	11,600	8,900	87,600	0.1 10.2
East Bay (a) (Alameda and Contra Costa Cos.)	30	310	19,300	14,900	111,800	0.1 13.3
North Bay (b) (Marin and Sonoma Cos.)	12	125	7,700	5,900	36,800	0.1 16.0
TOTAL	100	765 to 915	48,300 to 64,400	36,600 to 44,000	248,200	0.1 14.7 to 17.7

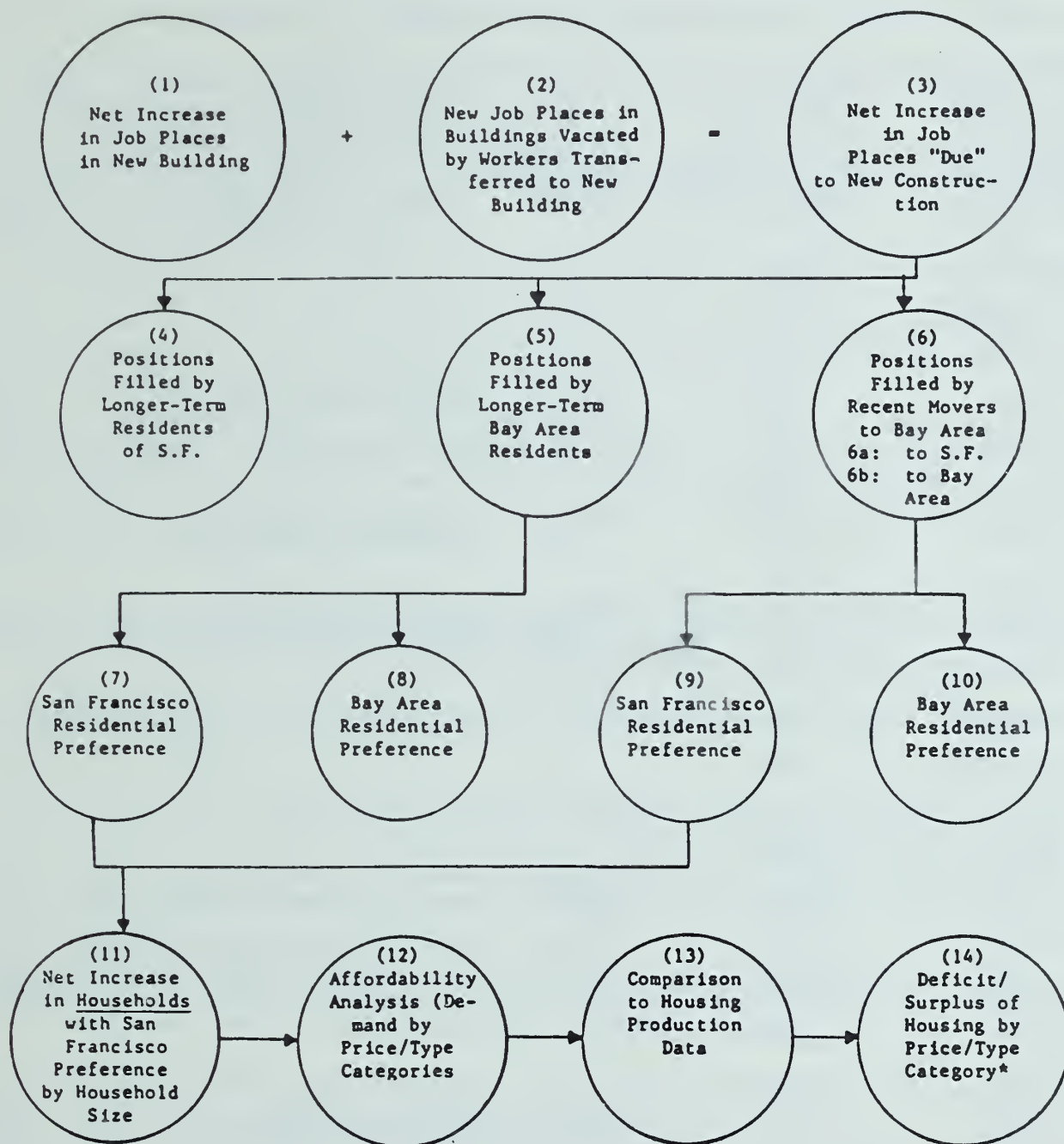
(a) Range of San Francisco employees and households based on 101 Montgomery Street Final EIR, EE80.26, certified May 7, 1981 (15-30% of all employees would reside in San Francisco and 1.4 workers would occupy each household) and "Office Housing Production Program (OHPP) Interim Guidelines," Department of City Planning, January 22, 1982 (40% of all employees would reside in San Francisco and 1.8 workers would occupy each household).

(b) Distribution of employees based on weighted average of expected employees in Federal Reserve Bank (EE78.207), 101 California Street (EE78.27), Pacific Gateway, (EE78.61), and Crocker National Bank (EE78.298), from 456 Montgomery Street Final EIR (EE78.178), p. 167. Workers per household in non San Francisco Counties is assumed to be 1.3 based on 1980 Census data.

(c) Total office space considered in this analysis is about 16.1 million sq. ft. of net new office space (see Tables B-2 and -3). The proposed Housing Element (May 1982) estimates San Francisco housing needs from 1980-85 in Table 21A. This estimate, based on the Citizen's Housing Task Force Report, July 21, 1981, shows a need for about 16,000 to 19,000 units. The "needs" estimate uses a similar office development basis but also includes housing demand generated by other sources in addition to office development and covers the years 1980-85.

(d) Net housing stock growth based on "Projections 79," Association of Bay Area Governments, January 1980. Projections contained in this document for 1980-1990 were prorated to reflect 1982-1990 net housing stock growth.

SOURCE: Environmental Science Associates, Inc.



* Demand due to citywide employment growth need also be considered here.

FIGURE E-1:
Housing Demand and Affordability
Model for New, High-Rise
Office Building

SOURCE: Questor Associates, June 1982

TABLE E-2: HOUSING AFFORDABILITY BY HOUSEHOLD INCOME

Gross Annual Income Per Household or Per Individual	Maximum Affordable Monthly Housing Expenditure*	Housing Cost and Type of Unit		Source
		Monthly Cost**	Type of Unit (Price)	
\$5,000	\$125			
8,300 (a)	208			
10,000	250			
10,680	267	\$267 -	Census Median Rent	(e1)
11,560	289	289 -	Studio Apartments	(f1)
15,000	375			
18,200	455	455 -	Median Rent, All Units	(f2)
20,000	500			
23,520	588	588 -	Rent, 3+ Bedroom Units	(f3)
25,000 (b)	625			
27,300 (c)	683			
30,000 (b)	750			
35,000	875			
40,000	1,000			
40,880	1,022	1,022 -	Lowest House Price (\$95,000)	(g1)
45,000	1,125	1,125 -	Census Median Value (104,600)	(e2)
50,000	1,250			
52,560	1,314			
55,000	1,375			
65,080	1,627	1,627 -	Median House Price (151,203)	(g2)
101,880	2,547	2,547 -	Highest House Price (236,750)	(g3)
300,000 (d)	7,500			

(continued)

TABLE E-2: Continued

* The Office Housing Production Program (OHPP) Interim Guidelines, January, 1982, define affordable housing as follows:

rental expenses not exceeding 30% of gross monthly income, adjusted for family size; and home ownership expenses not exceeding 38% of gross monthly income, adjusted for family size, including mortgage payments, property taxes, insurance, and/or homeownership association dues.

For the purpose of this table, 30% of gross monthly income is used to calculate housing affordability for both renters and owners. For owners it is assumed that eight percent of gross monthly income would cover property taxes, insurance, and/or homeownership association dues and other related expenses. No adjustment has been made for family size because family circumstances vary widely.

** Monthly housing costs refer to rents and mortgage payments for the housing prices shown in parentheses; sources of rents and house prices are as footnoted. Monthly costs of ownership housing were calculated as monthly mortgage expenses assuming 20% down payment, 30-year mortgage, and 16% interest rate, not including insurance, property taxes, and other related housing costs.

- a. U.S. Bureau of Labor Statistics, March, 1981, "Area wage survey for the San Francisco-Oakland, California Metropolitan Area." \$8,300 was the mean 1980 income of inexperienced file clerks, one of the lowest-paid office occupations listed.
- b. The range of \$25,000 to \$30,000 is assumed to approximate the median annual income of project employees.
- c. The \$27,300 income figure was derived by inflating the \$16,300 median income of downtown office workers from the 1974 SPUR survey through December, 1981 by 67% using U.S. Bureau of Labor Statistics national wage information for nonsupervisory finance, insurance, and real estate sector employees since 1974.
- d. Montgomery-Washington Building FEIR, 81.104E, certified January 28, 1982. The median salary of wage earners at 601 Montgomery St. was estimated to be \$52,560 and the highest salary for corporate officers \$300,000, according to a 1981 survey.
- e. City Planning and Information Services, "1980 Census Information," March 1982: 1. median rent 2. median noncondominium housing value
Rental data include residential hotels whose rent levels may be substantially lower than other types of rental dwellings and may therefore have an effect on the median rent.
- f. Department of City Planning, "Rent Survey," 1980. Median rents are for:
1. studio apartments 2. all units 3. 3+ bedrooms
These data are based on a small nonrandom sample of newspaper ads and may not reflect true rental costs.
- g. San Francisco Board of Realtors, "Multiple Sales Service," October 5, 1981. (Annual data on housing sales prices including all homes sold from February 11, 1981 to October 1, 1981):
1. lowest price 2. median price 3. highest price

SOURCE: Environmental Science Associates, Inc.

TABLE E-3: SUMMARY OF RECENT STUDIES ON FISCAL IMPACT OF DOWNTOWN DEVELOPMENT

STUDY, AUTHOR, DATE	PURPOSE OF STUDY	DATA SOURCES	STUDY METHODOLOGY	CONCLUSIONS
"Fiscal Concerns" in Downtown San Francisco Conservation and Development Planning Program, Phase I Study, Sedway/Cooke, et al., October 1979, pp. 56-59	To qualitatively assess the likely fiscal impact of new development in the C-3 area under Proposition O.	SPUR STUDY (1975)	SPUR cost/revenue estimates for downtown in 1973 and for projected growth 1974-1990 were assumed. Proposition 13's effect on revenues and the possible need for increased transportation infrastructure were considered. Generalized conclusions about fiscal impact of new development were drawn.	1) After Proposition 13, "costs may exceed revenues in the downtown by as much as 25%." 2) "If new downtown development will not solve the city's growing fiscal problem; without new revenue sources, development will make it worse in the long run."
Downtown Highrise District Cost Revenue Study, Arthur Andersen & Co., November 1980	To quantify for 1976-77 and 1978-79 how much revenue the C-3-0 area generated and how much it costs to provide city services to the area.	Data compiled from city records and through conversations with city officials.	Only revenues generated within the C-3-0 and costs of providing services to the C-3-0 counted. "The principle guiding the study methodology was to calculate the amount of revenue that San Francisco would lose and the costs that could be reduced if the Downtown Highrise District were a separate city."	The C-3-0 generated \$56.79 million in 1976-77, or 61% more than the cost of city services to the area. In 1978-79, revenues were \$53.29 million, or 48% greater than costs.
"Fiscal Considerations" Appendix C, 101 Montgomery Street FEIR, Recht Hausrath & Associates, January 1981.	To draw generalized conclusions about "how new development downtown in a post-Proposition 13 environment is likely to change the City's fiscal health from what it would be without new development."	SPUR Study, city records and conversations with city officials.	Under alternative assumptions about the cost/revenue balance in existing buildings and in new buildings, the fiscal impact over time of new development was compared to that of no new development.	"[A]n on-going process of new development would improve the City's fiscal situation. This beneficial impact would cease if new development were halted. This conclusion is tentative due to uncertainties about increased Muni costs."
Downtown Highrise District Cost/Revenue Study, David Jones, February 1981.	To quantify for 1978-79 the revenues generated by businesses in the C-3-0 and the service costs imposed on the city and BART by the C-3-0.	Arthur Andersen study.	The Jones study differs from the Andersen study primarily as follows: 1) Costs of BART (but not revenues to BART) are included; 2) Only revenues paid by businesses and building owners are considered; 3) Muni deficit is computed differently; percentage of revenues rather than on the basis of actual service demand in the C-3-0.	The C-3-0 imposed costs of \$94.4 million on San Francisco and BART, or 125% more than the revenues the area's businesses and building owners generated to San Francisco.
Fiscal Impacts of New Downtown High-Rises on the City and County of San Francisco, Gruen Gruen + Associates March 1981	To quantitatively estimate city revenues from the C-3-0 and costs of serving the C-3-0 in 1998, assuming the addition of 30 million square feet of building space in the C-3-0 between 1981 and 1998.	Arthur Andersen study; data compiled from city records and through conversations with city officials.	"Only direct effects are considered." Costs are only measured for services "provided within the physical limits of the C-3-0 district" and revenues are limited to "taxes on buildings within the district and the activities that take place within those buildings." Assumes the Arthur Andersen study is accurate and builds upon it.	In 1980, revenues from the 39 million square feet of building space in C-3-0 were 1.66 times as large as costs. In 1998, after completion of the 30 million square feet of new space, revenues from the entire 69 million square feet of C-3-0 building space would increase to 1.92 times as large as costs.

SOURCE: Recht Hausrath and Associates, January 1981.

APPENDIX F: TRANSPORTATION

Travel Demand

Travel demand from the 16.1 million gross sq. ft. of net new cumulative office development and 535,000 gross sq. ft. of net new cumulative retail development in downtown San Francisco has been estimated using a land-use approach for trip generation. Future travel into the downtown has been assumed to be a result of construction and occupancy of downtown office and retail space. The Office of Environmental Review of the Department of City Planning (DCP) has identified office projects in the greater downtown area as being under formal review, approved or under construction. Table B-2 shows the list of projects separated by review status and includes Assessor's Block number and DCP case number for each project. Table B-3 contains the total gross square feet of office and retail space for each review status category. The information contained in these tables represents the best data available from the Department of City Planning at the time of preparation of this document.

Existing office and retail space that would be replaced by new buildings was subtracted from the proposed new construction to better approximate the impacts the new buildings would have on transportation facilities. As shown in Table B-3, net new office and retail space is less than total new construction as a result of subtracting out existing office and retail space on sites proposed for new buildings. ("Net new" space is used to refer to the amount of new construction in excess of existing space on each site in terms of gross square feet of floor space. It does not refer to net leasable or net rentable floor space).

Estimates of future travel have been made using trip generation rates of 17.5 person trip ends (one way trips) per 1,000 net leasable sq. ft. of net new office space and 100 person trip ends (pte) per 1,000 gross sq. ft. of net new retail space./1/ Gross sq. ft. of office space was converted to net leasable sq. ft. by assuming an efficiency factor of 80%. The retail space has been assumed to be primarily "ground-floor retail" which would serve the office building users. Based upon survey data collected at the Embarcadero Center, approximately 45% of the travel generated by "ground-floor retail" uses has been assumed to be oriented to the office uses on-site and is already included in the office trip generation rate. Thus, 55% of the retail trip generation has been assumed to be "new" to each site./2/

P.M. peak-hour travel from the cumulative development was assigned to modes of travel based upon the regional distribution and modal split shown in Table F-1. During the p.m. peak hour about 20% of the office travel and 10% of the retail travel was assumed to occur. Of the office travel approximately 90% (during peak-hours) was assumed to be work-related and 10% was assumed to be other travel. On a daily basis, office travel was assumed to be 57% work-related and 43% other travel./3/

To calculate vehicle trip ends, average automobile occupancies were assumed for each regional area based upon available data. Currently, commute travel to the East Bay is about 1.8 persons per vehicle; the north Bay is about 1.5 persons per vehicle; and to the Peninsula is about 1.2 persons per vehicle./4/ San Francisco auto occupancy was assumed to be 1.4 persons per vehicle./5/

TABLE F-1: TRAVEL DISTRIBUTION AND MODAL SPLIT

<u>Geographic Area</u>	OFFICE					
	<u>Work Travel</u>			<u>Other Travel</u>		
	<u>Geog.</u> %*	<u>Mode</u>	%**	<u>Geog.</u> %*	<u>Mode</u>	%**
San Francisco						
Downtown/Northeast (East of Van Ness, North of Market to the Embarcadero, South of Market to 101)	7.0	Auto Muni BART Walk	9.0 61.0 1.0 29.0	33.0	Auto Muni BART Walk	2.0 20.0 0.0 78.0
Northwest (Richmond, Marina Western Addition)	15.0	Auto Muni	31.0 69.0	11.0	Auto Muni	15.0 85.0
Southwest (Sunset, Parkside, Ingleside, Excelsior, Twin Peaks, and Upper Market)	13.0	Auto Muni BART	29.0 62.0 9.0	13.0	Auto Muni BART	12.0 69.0 19.0
Southeast (Potrero Hill, Bayview, Hunters Point, East and South of 101)	5.0	Auto Muni BART	26.0 52.0 22.0	7.0	Auto Muni BART	13.0 38.0 50.0
Peninsula (San Mateo and Santa Clara Counties)	18.0	Auto Muni BART SamT SPRR	44.0 3.0 19.0 7.0 27.0	8.0	Auto Muni BART SamT SPRR	50.0 0.0 30.0 10.0 10.0
East Bay (Alameda and Contra Costa Counties)	30.0	Auto BART AC	33.0 37.0 30.0	20.0	Auto BART AC	13.0 79.0 8.0
North Bay*** (Marin and Sonoma Counties)	12.0	Auto GGTB GGTF	58.0 35.0 7.0	8.0	Auto GGTB GGTF	70.0 20.0 10.0

* Percent of travel with origins or destinations in each geographic area.

*** Percent of travel in each geographic area using listed mode of travel.

*** GGTB stands for Golden Gate Transit Bus; GGTF stands for Golden Gate Transit Ferry.

SOURCE: San Francisco Department of City Planning, TJKM, Environmental Science Associates.

A basic assumption in all of the transportation analyses is that existing regional distributions and modal splits would continue into the future unchanged. Thus, the implicit assumption has been made that about 40% of the future employees would live in San Francisco. If housing is not available in the City then a greater impact than noted would result on the commute corridors into the City from the North Bay, East Bay and Peninsula. If housing is not available in the City, however, the impact on the Muni would be less than noted because City residents are the majority of Muni users.

The availability of short-term parking was estimated in an area within 1,000 ft. of the project (which was assumed to represent a 5-minute walking time). Projects proposed and under construction that would generate short-term parking demand within the 1,000-ft. radius area were identified and the short-term parking demand was summed to give a projection of short-term demand. Long-term parking demand was based upon the number of expected work-related auto trips into the downtown. Parking supply was estimated over the greater downtown and South of Market area as travel time from parking space to final destination was no longer assumed to be the primary determinant for parking selection.

Vehicle travel and parking demand have been based upon demand projections and are unconstrained by the ability of the freeway and bridge system to carry the additional demand. Freeway and bridge capacity into downtown is essentially fixed at existing levels as major construction would be required to add new capacity. Current levels of vehicle traffic on the freeway and bridge system are at or near capacity. Thus, if the projection of person trip ends in autos is assumed to be correct, the levels of vehicle occupancy would have to increase in the future as the freeway and bridge system could not handle an appreciable increase in autos at the peak hour. If vehicle occupancy were to increase, vehicle trip ends and subsequent parking demand would be less than projected. Alternately, the peak hour level of demand could spread into hours adjacent to the peak hour (as is currently happening). However, there is a finite limit as to how far the peak can spread over time and still allow business to function.

Transit demand has been projected based upon existing travel patterns and is not dependent upon the availability of transit capacity (see Table 7, p. 77a). Two levels of operations (load factor) calculations have been made. One load factor has been calculated based upon existing capacity and is intended to represent conditions that would result if no improvements are made to the transit system. The second load factor is calculated based upon forecast capacity (as defined in each agency's five-year plan) and is intended to portray conditions that would result if planned, scheduled improvements are made.

Intersection Analysis

The capacity analysis of each intersection at which a turning movement count was made used the "critical lane" method. This method of capacity calculation is a summation of maximum conflicting approach lane volumes that gives the capacity of an intersection in vehicles per hour per lane. (This method is explained in detail in an article entitled "Intersection Capacity Measurement Through Critical Movement Summations: A Planning Tool," by Henry B. McInerney and Stephen G. Peterson, January 1971, Traffic Engineering. This method is also explained in "Interim Materials on Highway Capacity", Transportation Research Circular No. 212, Transportation Research Board, January 1980). The maximum service volume for Level of Service E was assumed as intersection capacity. A service volume is the maximum number of vehicles that can pass an intersection during a specified time period in which operating conditions are maintained corresponding to the selected and specified Level of Service. For each intersection analyzed, the existing peak-hour volume was computed and a volume-to-capacity (v/c) ratio was calculated by dividing the existing volume by the capacity at Level of Service E. Table F-3 shows the definitions of Levels of Service related to v/c ratio.

TABLE F-3: VEHICULAR LEVELS OF SERVICE

Level of Service	Description	Volume/Capacity* v/c Ratio
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.	0.60
B	Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can be generally described as very good.	0.61- 0.70
C	Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71- 0.80
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.	0.81- 0.90
E	Capacity occurs at level of service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.	0.91- 1.00
F	Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.	1.00

* Capacity is defined as Level of Service E.

SOURCE: San Francisco Department of Public Works, Traffic Division, Bureau of Engineering, 1965.



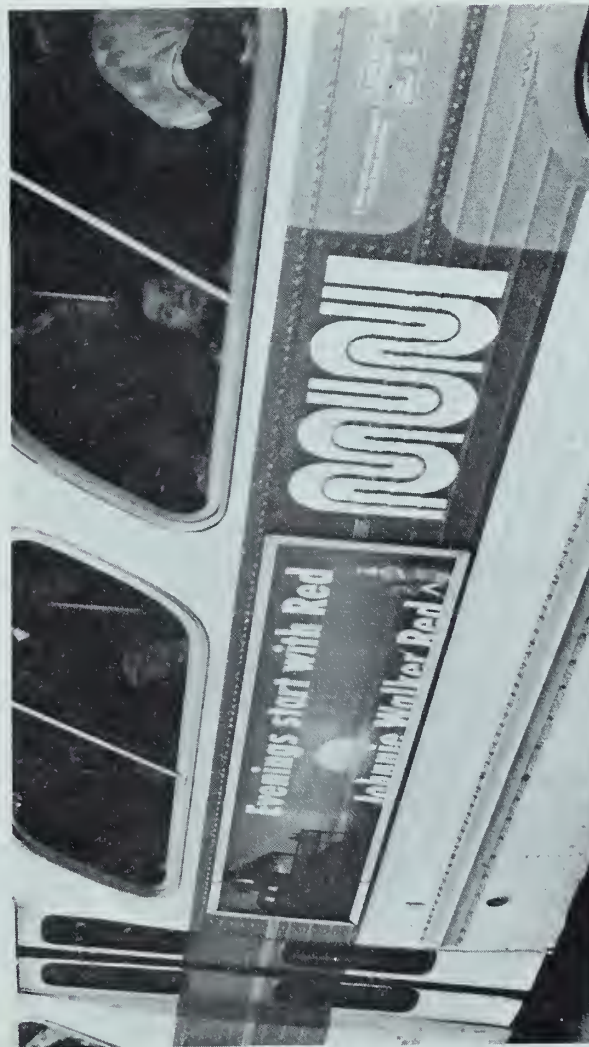
K Ingleside - Van Ness Station

Wednesday, September 9, 1981 - 8:00 A.M. - Inbound



N Judah - Van Ness Station

Wednesday, September 16, 1981 - 5:00 P.M. - Outbound



38 Geary - Van Ness Ave. and O'Farrell St.

Wednesday, October 21, 1981 - 9:00 A.M. - Inbound



38 Geary - Van Ness Ave. and Geary Blvd.

Wednesday, October 21, 1981 - 4:20 P.M. - Outbound

SOURCE: Environmental Science Associates, Inc.

FIGURE F1: Photographs of Peak
Muni Loading Condition



11 Hoffman - Mission St. and S. Van Ness Ave.
Wednesday, October 21, 1981 - 8:10 A.M. - Inbound



30X Marina Express - Bayshore Ave. and Arieta Ave.
Wednesday, October 7, 1981 - 8:00 A.M. - Inbound



11 Hoffman - Mission St. and S. Van Ness Ave.
Tuesday, September 29, 1981 - 5:10 P.M. - Outbound



J Church - Church St. and Duboce Ave.
Tuesday, September 29, 1981 - 9:00 A.M. - Outbound

SOURCE: Environmental Science Associates, Inc.

FIGURE F2: Photographs of Peak

LOADING CONDITIONS



M Ocean View - Civic Center Station

Wednesday, September 9, 1981 - 8:20 A.M. - Inbound



L Taraval - Van Ness Station

Wednesday, September 16, 1981 - 4:50 P.M. - Outbound



14 Mission - Mission St. and S. Van Ness Ave.

Tuesday, September 29, 1981 - 5:45 P.M. - Outbound



N Judah - Irving St. and Ninth Ave.

Tuesday, September 29, 1981 - 8:20 A.M. - Inbound

SOURCE: Environmental Science Associates, Inc.

**FIGURE F3: Photographs of Peak
Muni Loading Conditions**

TABLE F-4: PEDESTRIAN FLOW REGIMEN

FLOW REGIME	CHOICE	CONFLICTS	FLOW RATE (P/F/M)*	
			Average	percent of Capacity used
Open	Free Selection	None	0.5	0.0-3.0
Unimpeded	Some Selection	Minor	0.5-2	3.1-11.0
Impeded	Some Selection	High Indirect Interaction	2-6	11.1-33.0
Constrained	Some Restriction	Multiple	6-10	33.1-56.0
Crowded	Restricted	High Probability	10-14	56.1-78.0
Congested	All Reduced	Frequent	14-18	78.1-100.0
Jammed**	Shuffle Only	Unavoidable		above 100.0

* P/F/M = Pedestrians per foot of a effective sidewalk width per minute.

** For Jammed Flow, the (attempted) flow rate degrades to zero at complete breakdown.

SOURCE: Urban Space for Pedestrians, MIT Press, 1975, Cambridge, MA.

Employment Trend Approach to Cumulative Analysis

In this and other San Francisco EIRs, a land-use type of approach has been used to estimate the transportation impacts of both the proposed project and cumulative development. An alternate type of approach is to forecast travel demand based upon regional projections of employment share (employment trend approach).^{6/} Briefly, the fundamental differences between (and limitations of) the two approaches are:^{7/}

The land-use approach (as it has been applied in this EIR) has used net new office space actually proposed or under construction (less space in buildings demolished to make way for new buildings) as the basis for travel generation. The land-use approach assumes that literally all of the currently proposed development in the downtown area will be constructed and fully occupied within the time frame of the 580 California St. project development and occupancy. No allowance has been made for less than 100% occupancy, for proposed developments that are never constructed, or for those which would not be occupied within the time frame of the 580 California St. project.

The employment trend approach generates a total increase in employment in downtown that has taken account of loss of employment as industries and offices move out of the City, replacement of one type of industry with another (industry shifts), as well as, replacement of existing office space with new office space. The employment trend approach makes no implicit assumptions concerning occupancy rates or actual square footage of development constructed; rather, it generates total employment increases from a standpoint which assigns jobs by metropolitan sector (area) based upon extrapolation of past trends and which considers long-term industry shifts to, within, and away from each area.

Note that neither of the two approaches has attempted to project future changes in modal split.

To illustrate the differences in projections resulting from the two approaches, Table F-5 shows the total employment projections by the two methods (and the project's share thereof), the regional distribution of trips, and Muni's share of the new transit travel (and the project's share thereof).

As shown in the table, the employment trend approach predicts about 15% fewer employees in the downtown and about eight percent more riders on the Muni than does the land-use approach. The employment trend approach would thus approximate the transit demand impacts discussed on pp. 75-77 of the EIR.

Several considerations concerning both of the methods need to be noted. The land-use approach, as it has been applied in San Francisco EIR's, analyzes impacts for the p.m. peak hour, whereas the employment trend approach analyzes the a.m. peak. Several reasons exist as to why one peak (or the other) may be the better one to analyze.

First, the p.m. peak may be more useful to analyze, in that actual observation shows that the p.m. peak has a greater overall effect on the local street network and transit system in the downtown area than does the a.m. peak, as more travel takes place during the p.m. peak. Also, transit service is more inclined to differ from scheduled times during the p.m. peak than during the a.m. peak, as operational delays have had an 8- to 10-hour period over which to accumulate. Finally, the on-ramps to the freeway/bridge system are greater bottlenecks (in the p.m. peak) than are the off-ramps (in the a.m. peak).

Conversely, the peaking characteristics of the a.m. peak may be more useful in that they are much sharper than those of the p.m. peak (i.e., a greater percentage of the peak-period travel occurs during a single hour). Also, as a result of the bridge system into San Francisco, travel inbound into the City is much easier to document, as tolls are collected on the inbound direction on the Golden Gate and Bay Bridges. Finally, a greater proportion of the travel occurring during the a.m. peak is employment-related; the p.m. peak includes shopping and pleasure trips which are not directly affected by increased office space.

The land-use approach, as it has been used in this EIR, examines the p.m. peak because it has been observed to be the worst case for congestion on the City transportation system. This analysis does not reflect the spreading of the p.m. peak that is currently occurring, as all of the new trips have been assumed to take place in a single hour.

While the land-use approach assumes all new office space is fully occupied, the assumption of a functional vacancy rate of 5% is not uncommon.^{6/} With 16.1 million square feet of new office space assumed in the land-use approach to be occupied by 1990, a 5% vacancy would amount to approximately 805,000 sq. ft., representing 7,200 employees (at 250 sq. ft. per employee), 600 of which would ride Muni in the p.m. peak hour. This adjustment for vacancy would thus reduce Muni peak-hour impacts in the cumulative analysis stated above by these 600 riders.

The land-use approach calculations have assumed transit capacity to be fixed at existing levels. The OER memorandum^{6/} points out, "It should be recognized that transportation is a more 'elastic' resource with many options for expansion including increasing existing capacity by using articulated vehicles, expanded car pool and van pool programs and increasing the peak commuter period through flex-time programs, among others."

TABLE F-5: COMPARISONS OF LAND-USE AND EMPLOYMENT TREND APPROACHES

Approach	Downtown Employment Increase	Project Share*	Regional Trip Share				Muni Peak-hour Increase**	Project Share***
			S.F.	Pen.	E.B.	N.B.		
Land Use	64,400	1.7%	49%	16%	24%	11%	12,000	1.6%
Empl. Trend+ (maximum)	56,100	2.0%	50- 54%	19%	17- 21%	10%	12,900++	1.5%

NOTE: As explained in the text, comparisons between the entries for the two approaches must be made with the understanding that the land-use approach reflects increases in employment and transit demand based solely upon increases in downtown office space, while the employment trend approach reflects total increases therein based upon historical trends. The differences among the regional trip share figures reflect these and the other differences between the two approaches.

*Employment generated by the proposed 580 California Street project, as a percent of the cumulative downtown employment increase.

**The Muni peak-hour increase is a demand projection (based upon existing and long-term employment trends) that is not dependent upon available or expected transit capacity.

***Muni peak-hour trips generated by the proposed 580 California St. project, as a percent of the cumulative downtown Muni peak-hour increase.

+These figures, represent the worst-case analysis under the employment trend approach reviewed and accepted by MTC, ABAG and Muni. Note that the land-use approach entries assume that an additional net new 16.1 million gross sq. ft. of office space will come on line by late 1990.

++Based on 54% regional trip split to San Francisco (worst-case).

SOURCE: Environmental Science Associates, Inc.

If future office development does not occur along the lines of the past long-term trends as assumed in the employment trend approach, then the projections made in Working Paper I would be revised. The average annual growth during the period 1965-1980 was less than the growth per year proposed, approved, or under construction for the period 1980-1984. The employment trend approach assumes average growth through 1990 would be at the lower historic rate, reflecting activity fluctuations from the current rate including slowdowns due to changing business conditions.

Until a forecast exists to determine how the current decade's cycle of development may differ from the past, a judgment of the applicability of results from Working Paper I may not be made. Consequently, this EIR has retained the land-use approach and presented this comparison of the employment trend approach. Both methods should be looked upon as describing potential scenarios of future conditions.

NOTES - Appendix F

/1/ The regional distribution, office trip generation, trip purpose and peak hour percentage are from Attachment 1 of the Guidelines for Environmental Impact Review, Transportation Impacts Department of City Planning, October 1980 and the modal split assignment is from Attachment 2 supplemented by survey data collected by Environmental Science Associates, Inc.

/2/ Retail trip generation is from Trip Generation, Institute of Transportation Engineers (ITE), 1979. Rates have been adjusted from vehicle trip ends to person trip ends based upon an assumed vehicle occupancy of 1.4 persons per vehicle. The survey of retail travel was conducted by Environmental Science Associates at Embarcadero Center on Thursday, June 17, 1982 between 10:00 a.m. and 4:00 p.m.

/3/ The percentage of work and non-work trips is from the Guidelines (see note 1) and from Urban Travel Patterns for Hospitals, Universities, Office Buildings, and Capitols, Report No. 62, National Cooperative Highway Research Program.

/4/ East Bay auto occupancy is from data collected at the Bay Bridge toll plaza by the Metropolitan Transportation Commission; North Bay auto occupancy is from data collected at the Golden Gate Bridge toll plaza by the Golden Gate Bridge, Highway and Transportation District; Southern Peninsula auto occupancy is an estimate from CalTrans.

/5/ The occupancy rate is from The Downtown Traffic and Parking Study, San Francisco Department of Public Works, 1970.

/6/ Department of City Planning, Working Paper I, Projection of Long-range Transportation Demand, May, 1982, prepared in cooperation with the Metropolitan Transportation Commission (MTC), the Association of Bay Area Governments (ABAG), and the Municipal Railway (Muni). Employment trend data was compiled by ABAG from trends in County Business Pattern (U.S. Department of Commerce, Bureau of the Census, March 12, 1979), with 1979 as the base year for future projections and regional distributions. Modal split data are from the 1975 Travel Survey prepared by MTC.

/7/ The Department of City Planning, Office of Environmental Review (OER), has issued a memorandum, dated July 2, 1982, dealing with the subject of the differences in the land-use and employment trend approaches, and recommending that both approaches be used in future EIRs to give a more balanced assessment of future peak transportation demand. This memorandum is on file with and available from the Office of Environmental Review, 450 McAllister St., 5th Floor. The memorandum calls out some of the fundamental differences between the two approaches and also details the limitations of each approach.

APPENDIX G: AIR QUALITY

TABLE G-1: SAN FRANCISCO AIR POLLUTANT SUMMARY 1979-1981

STATIONS: 939 Ellis Street (1979) and 900 23rd St. (1980-81), San Francisco

<u>POLLUTANT:</u>	<u>STANDARD</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
OZONE (O ₃) (Oxidant)				
1-hour concentration (ppm /a/)				
Highest hourly average	0.10/b/ 0.12/c,d/	0.08	0.09	0.07
Number of standard excesses (state)		0	0	0
Expected Annual Excess (national)/d/		0.0	0.0	0.0
CARBON MONOXIDE (CO)				
1-hour concentration (ppm)				
Highest hourly average	35/c/	20	10	8
Number of standard excesses		0	0	0
8-hour concentration (ppm)				
Highest 8-hour average	9/c/	13.8	7.5	5.3
Number of standard excesses		1	0	0
NITROGEN DIOXIDE (NO ₂)				
1-hour concentration (ppm)				
Highest hourly average	0.25/b/	0.16	0.17	0.11
Number of standard excesses		4	0	0
SULFUR DIOXIDE (SO ₂)				
24-hour concentration (ppm)				
Highest 24-hour average	0.05/b/	0.034	0.018	0.016
Number of standard excesses/e,f/		0	0	0
TOTAL SUSPENDED PARTICULATE (TSP)				
24-hour concentration (ug/m ³ /g/)				
Highest 24-hour average	100/b/	117	173	103
Number of standard excesses/f/	1	1	6	
Annual concentration (ug/m ³)				
Annual Geometric Mean	60/b/	42.0	52.1	56.0
Annual standard excess		No	No	No
LEAD				
Calendar quarter concentration (mg/m ³)				
Highest quarterly average	1.5 /b/	0.95	0.53	0.35
Number of standard excesses		0	0	0

(continued)

TABLE G-1: SAN FRANCISCO AIR POLLUTANT SUMMARY 1979-1981 (Continued)

/a/ ppm: parts per million.

/b/ California standard, not to be equaled or exceeded.

/c/ National standard, not to be exceeded more than once per year (except for annual standards which are not to be exceeded).

/d/ The national ozone standard was revised from 0.08 ppm to 0.12 ppm in January 1979 and is now expressed in terms of the Expected Annual Excess, which is a three-year average of annual excesses of the 0.12 ppm value.

/e/ The sulfur dioxide standard is considered to be exceeded only if there is a concurrent excess of the state ozone or suspended particulate standards at the same station. Otherwise, the national standard of 0.14 ppm applies.

/f/ Number of observed excess days (measurements taken once every six days).

/g/ $\mu\text{g}/\text{m}^3$: micrograms per cubic meter.

SOURCE: BAAQMD, Air Pollution in the Bay Area by Station and Contaminant; and California Air Resources Board, California Air Quality Data.



